

Appendix B

WETLAND DELINEATION INFORMATION



Lower Afton Road

Maplewood, Ramsey County, Minnesota

Wetland Delineation Report

Prepared for

D. R. Horton

by

Kjolhaug Environmental Services Company, Inc.

(KES Project No. 2023-160)

November 17th, 2023

Lower Afton Road

Maplewood, Ramsey County, Minnesota

Wetland Delineation Report

TABLE OF CONTENTS

Title	Page
1. WETLAND DELINEATION SUMMARY	2
2. OVERVIEW	2
3. METHODS	3
3.1 Wetland Delineation	3
4. RESULTS	4
4.1 Review of NWI, Soils, Public Waters, and NHD Information	4
4.2 Wetland Determinations and Delineations.....	5
4.3 Historic Aerial Review.....	8
4.4 Other Areas	8
4.5 Request for Wetland Boundary and Jurisdictional Determination	8
5. CERTIFICATION OF DELINEATION.....	9

FIGURES

1. Site Location
- 2A. Existing Conditions North
- 2B. Existing Conditions South
3. National Wetlands Inventory
4. Soil Survey
5. DNR Public Waters Inventory
6. National Hydrography Dataset

APPENDICES

- A. Joint Application Form for Activities Affecting Water Resources in Minnesota
- B. Wetland Delineation Data Forms
- C. Precipitation Data
- D. Historic Aerial Photo Review

Lower Afton Road

Maplewood, Ramsey County, Minnesota

Wetland Delineation Report

1. WETLAND DELINEATION SUMMARY

- The 88.53-acre Lower Afton Road site was inspected on November 1st and 2nd, 2023 for the presence and extent of wetland.
- The National Wetlands Inventory (NWI) map showed several excavated open water wetlands (PUBGx/PABGx/PUBFx), a large open water wetland (PABG/PEM1F/PEM1C), and several depressional wetlands (PEM1A) within the review area.
- The soil survey showed Seelyeville muck as the mapped hydric soil type within the review area.
- The DNR Public Waters Inventory identified DNR Public Water Wetland 62-248 W (unnamed) within the review area, two unnamed DNR Public Water Wetlands (62-439 W and 82-440 W) within 1,000 sf of the review area boundaries, and an unnamed DNR Public Water Wetland within 1,200 sf of the eastern review area boundary.
- The National Hydrography Dataset showed five Lake/Pond surface water features within the review area.
- Fourteen (14) wetlands were delineated onsite, as summarized on **Page 6 and 7** of this report. Wetlands 1, 2, 3, 4, 7, 8, and a portion of 14 were incidentally created based on the historic aerial review.

2. OVERVIEW

The 88.53-acre Lower Afton Road site was inspected on November 1st and 2nd, 2023 for the presence and extent of wetland. The property was located in Section 12, Township 28 North, Range 22 West, City of Maplewood, Ramsey County, Minnesota. The site was south of Lower Afton Road and north of Linwood Avenue East, along Century Avenue South (CH 25/72) (**Figure 1**). The review area corresponded to portions of Ramsey County PIDs: 122822110002 (297 Century Avenue South; 141.04 acres) and 122822440002 (2621 Linwood Avenue East; 37.06 acres).

The site consisted of an abandoned golf course, associated paved trails, parking lots, and buildings. The site contained several historic and excavated wetlands. The previously managed greenways were dominated by planted turfgrass and several volunteer species, such as common mullein, Canada thistle, crown vetch, and common tansy. Several portions of the site appeared to

have been planted with a native seed mix containing wild bergamot, cup plant, little bluestem, big bluestem, side-oats grama, and Indian grass. Topography on the site peaked in the southwestern portion of the site (1080 ft MSL) and gradually sloped towards to the northwest corner (1010 ft MSL).

Fourteen (14) wetlands were delineated within the site boundaries. The delineated wetland boundaries and existing conditions are shown on **Figures 2, 2A, and 2B**.

Appendix A of this report includes a Joint Application Form for Activities Affecting Water Resources in Minnesota, which is submitted in a request for a wetland boundary and type determination approval from the Ramsey-Washington Metro Watershed District under the Minnesota Wetland Conservation Act (WCA). This report also requests incidental determination approval for Wetlands 1, 2, 3, 4, 7, 8, and a portion of 14.

3. METHODS

3.1 Wetland Delineation

Wetlands were identified using the Routine Determination method described in the Corps of Engineers Wetlands Delineation Manual (Waterways Experiment Station, 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) as required under Section 404 of the Clean Water Act and the Minnesota Wetland Conservation Act.

Wetland boundaries were identified as the upper-most extent of wetland that met criteria for hydric soils, hydrophytic vegetation, and wetland hydrology. Wetland-upland boundaries were marked with pin flags that were located with handheld GPS units with sub-meter accuracy.

Soils, vegetation, and hydrology were documented at a representative location along the wetland-upland boundary. Plant species dominance was estimated based on the percent aerial or basal coverage visually estimated within a 30-foot radius for trees and vines, a 15-foot radius for the shrub layer, and a 5-foot radius for the herbaceous layer within the community type sampled.

Soils were characterized to a minimum depth of 24 inches (unless otherwise noted) using a Munsell Soil Color Book and standard soil texturing methodology. Hydric soil indicators used are from Field Indicators of Hydric Soils in the United States (USDA Natural Resources Conservation Service (NRCS) in cooperation with the National Technical Committee for Hydric Soils, Version 8.1, 2017).

Mapped soils are separated into five classes based on the composition of hydric components and the Hydric Rating by Map Unit color classes utilized on Web Soil Survey. The five classes include Hydric (100 percent hydric components), Predominantly Hydric (66 to 99 percent hydric components), Partially Hydric (33 to 65 percent hydric components), Predominantly Non-Hydric (1 to 32 percent hydric components), and Non-Hydric (less than one percent hydric components).

Plants were identified using standard regional plant keys. Taxonomy and indicator status of plant species was taken from the 2018 National Wetland Plant List (U.S. Army Corps of Engineers 2018. National Wetland Plant List, version 3.3, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH).

4. RESULTS

4.1 Review of NWI, Soils, Public Waters, and NHD Information

The National Wetlands Inventory (NWI) (Minnesota Geospatial Commons 2009-2014 and U.S. Fish and Wildlife Service showed several excavated open water wetlands (PUBGx/PABGx/PUBFx), a large open water wetland (PABG/PEM1F/PEM1C), and several depressional wetlands (PEM1A) within the review area (**Figure 3**).

The Soil Survey (USDA NRCS 2015) showed Seelyeville muck as the mapped hydric soil type within the review area. Soil types mapped on the property are listed in **Table 1**, and a map showing soil types is included in **Figure 4**.

Table 1. Soil types mapped within the Lower Afton Road review area.

Symbol	Map unit name	Acres in AOI	Percent of AOI	Rating	Hydric Category
540	Seelyeville muck	1.3	1.5%	100%	Hydric
166	Ronneby fine sandy loam	0	0.0%	5%	Predominantly Non-Hydric
452	Comstock silt loam, 0 to 3 percent slopes	7.2	8.1%	5%	Predominantly Non-Hydric
342B	Kingsley sandy loam, 2 to 6 percent slopes	0.2	0.2%	3%	Predominantly Non-Hydric
504B	Duluth silt loam, 1 to 6 percent slopes	10.9	12.2%	3%	Predominantly Non-Hydric
504C	Duluth silt loam, 6 to 12 percent slopes	10.9	12.3%	3%	Predominantly Non-Hydric
504D	Duluth silt loam, 12 to 25 percent slopes	7.9	8.9%	3%	Predominantly Non-Hydric
507	Poskin silt loam	5	5.6%	3%	Predominantly Non-Hydric
49C	Antigo silt loam, 6 to 15 percent slopes	1.4	1.6%	0%	Non-Hydric
153B	Santiago silt loam, 2 to 6 percent slopes	22.3	25.2%	0%	Non-Hydric
342C	Kingsley sandy loam, 6 to 12 percent slopes	4	4.5%	0%	Non-Hydric
342E	Kingsley sandy loam, 18 to 30 percent slopes	12.9	14.5%	0%	Non-Hydric
W	Water	4.8	5.4%	0%	Non-Hydric

The Minnesota DNR Public Waters Inventory (Minnesota Department of Natural Resources 2015) identified DNR Public Water Wetland 62-248 W (unnamed) within the review area, two unnamed DNR Public Water Wetlands (62-439 W and 82-440 W) within 1,000 sf of the review area boundaries, and an unnamed DNR Public Water Wetland within 1,200 sf of the eastern review area boundary (**Figure 5**).

The National Hydrography Dataset (U.S. Geological Survey 2015) showed five Lake/Pond surface water features within the review area (**Figure 6**).

4.2 Wetland Determinations and Delineations

Potential wetlands were evaluated during field observations on November 1st and 2nd, 2023. Fourteen (14) wetlands were identified and delineated on the property (**Figure 2**). Corresponding data forms are included in **Appendix B**. The following description of the wetlands and their adjacent upland reflects conditions observed at the time of the field visit. At that time, some vegetation was still growing, while some had senesced. Precipitation conditions were normal (typical) based on the three-month antecedent precipitation data for a date of November 1st, 2023, and above the normal range based on the 30-day rolling total. In the two weeks leading up to the site visit, 1.85” of precipitation fell (**Appendix C**). Delineated wetland characteristics are summarized in **Table 2** (see **pages 6 and 7**).

Table 2. Summary of Delineated Wetlands - Lower Afton Road

WL ID	Onsite Acreage	Circular 39	Cowardin	Eggers and Reed	Vegetation	Adjacent Upland Vegetation	Observed Drainage Features	Observed Hydrology Indicator/s	Mapped WTL	Mapped Soil Type & Observed Hydric Indicator	Incidental Status **
1	0.04	Type 3/1	PEM1Cx/Ax	Excavated shallow marsh with a seasonally flooded portion connected via excavated drainageway #1	Dominated by sandbar willow saplings with lesser amounts of cattails, reed canary grass, giant goldenrod.	Common buckthorn trees/shrubs, Allegheny blackberry, bush clover, Canada thistle, wild bergamot, cup plant, Kentucky bluegrass, and crown vetch.	A culvert inlet to the shallow marsh portion and two culverts on the NW boundary drained the excavated seasonally flooded portion.	Geomorphic Position & FAC-Neutral Test	None	Poskin silt loam (Predominantly Non-Hydric) & Santiago silt loam (Non-Hydric); Redox Dark Surface (F6)	Incidentally Created-Excavated in historic upland
2	0.78	Type 5	PUBGx	Excavated shallow open water	Narrow fringe of narrowleaf cattail, woolgrass, blue vervain, and sandbar willow.	Kentucky bluegrass, knapweed, wild bergamot, side oats grama, little bluestem, and Canada goldenrod.	None. No inlets or outlets observed.	Geomorphic Position & FAC-Neutral Test	PUBGx	Poskin silt loam (Predominantly Non-Hydric) & Santiago silt loam (Non-Hydric); Redox Dark Surface (F6)	Incidentally Created-Excavated in historic upland
3	0.77									Poskin silt loam (Predominantly Non-Hydric) & Comstock silt loam (Predominantly Non-Hydric); Redox Dark Surface (F6)	
4	0.81	Type 5/3/1	PABGx/PEM1Cx/PEM1Ax	Excavated shallow open water wetland with a shallow marsh fringe and an excavated seasonally flooded drainageway (#2)	Dominated by sandbar willow shrubs and narrowleaf cattails with lesser amounts of reed canary grass, woolgrass, purple loosestrife, northern bugleweed, and blue vervain.	Crown vetch, Canada thistle, cup plant, Canada goldenrod, Indian grass, common tansy, wild bergamot, ground ivy, New England aster, common mullein, little bluestem, and bush clover.	A culvert along the northern wetland boundary allows hydrology to outlet.	High Water Table, Saturation, Dry-Season Water Table, and FAC-Neutral Test	PABGx	Comstock silt loam (Predominantly Non-Hydric) & Santiago silt loam (Non-Hydric); 2cm Muck (A10), Depleted Below Dark Surface (A11), and Redox Dark Surface (F6)	Incidentally Created-Excavated in historic upland
5	0.33	Type 3/1	PEM1C/A	Shallow marsh with a seasonally flooded fringe	Dominated by river bulrush with lesser amounts of reed canary grass, narrowleaf cattail, and Pennsylvania smartweed.	Red-osier dogwood shrubs, grass-leaved goldenrod, Canada goldenrod, and curly dock.	Wetland 5 continued slightly offsite to the west.	Geomorphic Position & FAC-Neutral Test	PEM1C/A	Duluth silt loam (Predominantly Non-Hydric); Depleted Below Dark Surface (A11) and Depleted Matrix (F3)	Historic Wetland
6	0.65	Type 5/2/1	PABG/PEM1A	Shallow open water wetland with a wet meadow fringe and a seasonally flooded portion	Primarily open water with a fringe of reed canary grass, devil's beggarticks, river bulrush, and swamp milkweed. The seasonally flooded portion was dominated by reed canary grass.	Kentucky bluegrass, Canada thistle, common tansy, knapweed, and common mullein.	None. No inlets or outlets observed.	Geomorphic Position & FAC-Neutral Test	PUBF/PEM1A	Duluth silt loam (Predominantly Non-Hydric); Depleted Below Dark Surface (A11)	Historic Wetland
7	0.03	Type 1	PEM1Ax	Excavated wet meadow	Dominated by reed canary grass, pennsylvania smartweed, and woolgrass.	Kentucky bluegrass, common burdock, witchgrass, red-osier dogwood, big bluestem, sandbar willow, Virginia mountain mint, and Canada goldenrod.	None. No inlets or outlets observed.	High Water Table, Saturation, Dry-Season Water Table, Geomorphie Position & FAC-Neutral Test	None	Santiago silt loam (Non-Hydric); Depleted Matrix (F3)	Incidentally Created-Excavated in historic upland
8	0.23	Type 5/3	PEM1Fx/Cx	Excavated shallow open water wetland with a shallow marsh fringe	Primarily open water with a fringe of narrowleaf cattail, sandbar willow, eastern cottonwood saplings, reed canary grass, purple loosestrife, and woolgrass.	Kentucky bluegrass, crown vetch, big bluestem, wild bergamot, Canada goldenrod, and paper birch trees.	None. No inlets or outlets observed.	Geomorphie Position & FAC-Neutral Test	PUBGFx	Duluth silt loam (Predominantly Non-Hydric) & Santiago silt loam (Non-Hydric); 2cm Muck (A10) and Depleted Matrix (F3)	Incidentally Created-Excavated in historic upland

** Based on historic aerial review

Table 2. Summary of Delineated Wetlands - Lower Afton Road

WL ID	Onsite Acreage	Circular 39	Cowardin	Eggers and Reed	Vegetation	Adjacent Upland Vegetation	Observed Drainage Features	Observed Hydrology Indicator/s	Mapped NWI WTL	Mapped Soil Type & Observed Hydric Indicator	Incidental Status **
9	0.08	Type 5/2	PEM1F/B	Shallow open water with a wet meadow fringe	Primarily open water wetland with a fringe of reed canary grass, narrowleaf cattail, blue vervain, and devil's beggartick.	Quaking aspen and northern red oak trees, common buckthorn shrubs, kentucky bluegrass, and reed canary grass.	Wetland 9 continues offsite to the west.	Dry-Season Water Table, Geomorphic Position, and FAC-Neutral Test	PUBF/ PEM1A	Duluth silt loam (Predominantly Non-Hydric) & Kingsley sandy loam (Non-Hydric); 2 cm Muck (A10) and Thick Dark Surface (A12)	Historic Wetland
10	0.91	Type 5/3/2	PEM1F/C/B	Shallow open water with a shallow marsh and wet meadow fringe	Primarily open water with fringe of narrowleaf cattails, smartweed, blue vervain, and reed canary grass.	Red maple and northern red oak trees, common buckthorn shrubs, Kentucky bluegrass, Canada goldenrod, common mullein, curly dock, Canada thistle, and red-osier dogwood saplings.	None. No inlets or outlets observed.	Dry-Season Water Table, Geomorphic position, and FAC-Neutral Test	PUBGx	Duluth silt loam (Predominantly Non-Hydric) & Kingsley sand loam (Non-Hydric); Depleted Below Dark Surface (A11)	Historic Wetland
11	2.76	Type 5/3/2	PEM1F/C/B	Shallow open water with a shallow marsh and wet meadow fringe	Primarily open water with a fringe of narrowleaf cattail, river bulrush, devil's beggarticks, soft-stem bulrush, woolgrass, spotted joe-pye weed, blue lobelia, smartweed, blue vervain, sensitive fern, purple loosestrife, red-osier dogwood shrubs, and reed canary grass.	Kentucky bluegrass, smooth brome, common milkweed, New England aster, allegheny blackberry, virginia mountain mint, riverbank grape, common buckthorn shrubs, quaking aspen and paper birch trees.	None. No inlets or outlets observed.	Geomorphic Position and FAC-Neutral Test	PUBGx/ PEM1C/ PEM1A	Duluth silt loam (Predominantly Non-Hydric); 2 cm Muck (A10) and Thick Dark Surface (A12)	Historic Wetland
12	5.22	Type 5/3/2/1	PEM1F/C/B/ A	Shallow open water with a shallow marsh and wet meadow fringe and shallow marsh and seasonally flooded portions	Primarily open water with a fringe of narrowleaf cattail, devil's beggarticks, woolgrass, river bulrush, blue vervain, northern bugleweed, reed canary grass, and purple loosetrife.	Quaking aspen, northern red oak, and paper birch trees, common buckthorn, smooth sumac, riverbank grape, Kentucky bluegrass, <i>Rubus sp.</i> , Canada goldenrod, and big bluestem.	Wetland 12 continues offsite to the west.	Dry-Season Water Table, Geomorphic Position, and FAC-Neutral Test	PABG/ PEM1F/ PEM1C/ PEM1A DNR Public Water Wetland 62-248 W	Kingsley sandy loam (Non-Hydric), Duluth silt loam (Predominantly Non-Hydric); Depleted Below Dark Surface (A11) and Redox Dark Surface (F6)	Historic Wetland
13	0.07	Type 1	PEM1A	Seasonally flooded basin	Dominated by reed canary grass with lesser amounts of Pennsylvania smartweed, curly dock, and Canada thistle.	Red maple trees, common buckthorn shrubs, Kentucky bluegrass, common tansy, and Canada goldenrod.	None. No inlets or outlets observed.	Geomorphic Position and FAC-Neutral Test	PEM1A	Duluth silt loam (Predominantly Non-Hydric) and Kingley sandy loam (Non-Hydric); Redox Dark Surface (F6)	Historic Wetland
14	0.52	Type 5/2	PEM1FxB	Excavated shallow open water with wet meadow fringe	Primarily open water with a fringe of river bulrush, reed canary grass, northern bugleweed, Canada thistle, blue flag iris, and devil's beggarticks.	Paper birch and quaking aspen trees, Kentucky bluegrass, Canada goldenrod, and big bluestem.	None. No inlets or outlets observed.	Geomorphic Position and FAC-Neutral Test	PABGX	Duluth silt loam (Predominantly Non-Hydric); Depleted Matrix (F3)	Partially Incidentally Created- Partial Excavation in Upland

** Based on historic aerial review

4.3 Historic Aerial Review

A historic aerial review was conducted to determine if any of the fourteen wetlands delineated onsite were excavated in historic upland. Five Ramsey County historic aerial photographs were reviewed (2003, 1991, 1985, 1953, and 1940) (**Appendix D**). The 1991 and prior photographs represent the site before it was developed into a golf course. No wet signatures (soil saturation, standing water, crop stress, etc.) were observed in the current location of Wetlands 1, 2, 3, 4, 7, 8, and a portion of 14. The northwestern portion of Wetland 14 does not exhibit any wet signatures on the historic aerials as shown in **Appendix D**. These wetlands were determined to be incidental and not regulated by the Wetland Conservation Act.

4.4 Other Areas

Drainageway #1 is located in the northwest corner of the review area and connects the excavated shallow marsh portion to the excavated seasonally flooded portion of Wetland 1 and then outlets under Lower Afton Road. The channel was unvegetated with a rock bottom and uniform slopes.

Drainageway #2 is an ephemeral drainageway along the eastern boundary. The channel was dominated by reed canary grass with lesser amounts of Canada bluejoint and woolgrass. Riprap was placed intermittently. The drainageway sloped gradually downhill to the excavated shallow open water portion of Wetland 4.

No other depressional areas with hydrophytic vegetation or wetland hydrology were observed on the site. No other areas were shown as hydric soil on the soil survey or as wetland on the NWI map.

4.5 Request for Wetland Boundary and Jurisdictional Determination

Appendix A of this report includes a Joint Application Form for Activities Affecting Water Resources in Minnesota, which is submitted in a request for a wetland boundary and type determination approval from the Ramsey-Washington Metro Watershed District under the Minnesota Wetland Conservation Act (WCA). This report also requests incidental determinations approval for Wetlands 1, 2, 3, 4, 7, 8, and a portion of 14.

5. CERTIFICATION OF DELINEATION

The procedures utilized in the described delineation are based on the U.S. Army Corps of Engineers 1987 Wetlands Delineation Manual as required under Section 404 of the Clean Water Act and the Minnesota Wetland Conservation Act. This wetland delineation and report were prepared in compliance with the regulatory standards in place at the time the work was performed. Site boundaries indicated on figures within this report are approximate and do not constitute an official survey product.

Delineation completed by: Mary Clare McAleer, Wetland/Soil Specialist
Minnesota Certified Wetland Professional In-Training No. 5466

Michael Gurrieri, Wetland Professional In-Training

Report prepared by: Mary Clare McAleer, Wetland/Soil Specialist
Minnesota Certified Wetland Professional In-Training No. 5466

Report reviewed by:  _____ Date: November 17th, 2023

Mark Kjolhaug, Professional Wetland Scientist No. 000845

Lower Afton Road

Wetland Delineation Report

FIGURES

1. Site Location
- 2A. Existing Conditions
- 2B. Existing Conditions North
- 2C. Existing Conditions South
3. National Wetlands Inventory
4. Soil Survey
5. DNR Protected Waters Inventory
6. National Hydrography Dataset
7. Offsite Hydrology Assessment Areas



Figure 1 - Site Location



N

0 2,000 Feet



Lower Afton Road (KES 2023-160)
Maplewood, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.



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Source: OpenStreets Map

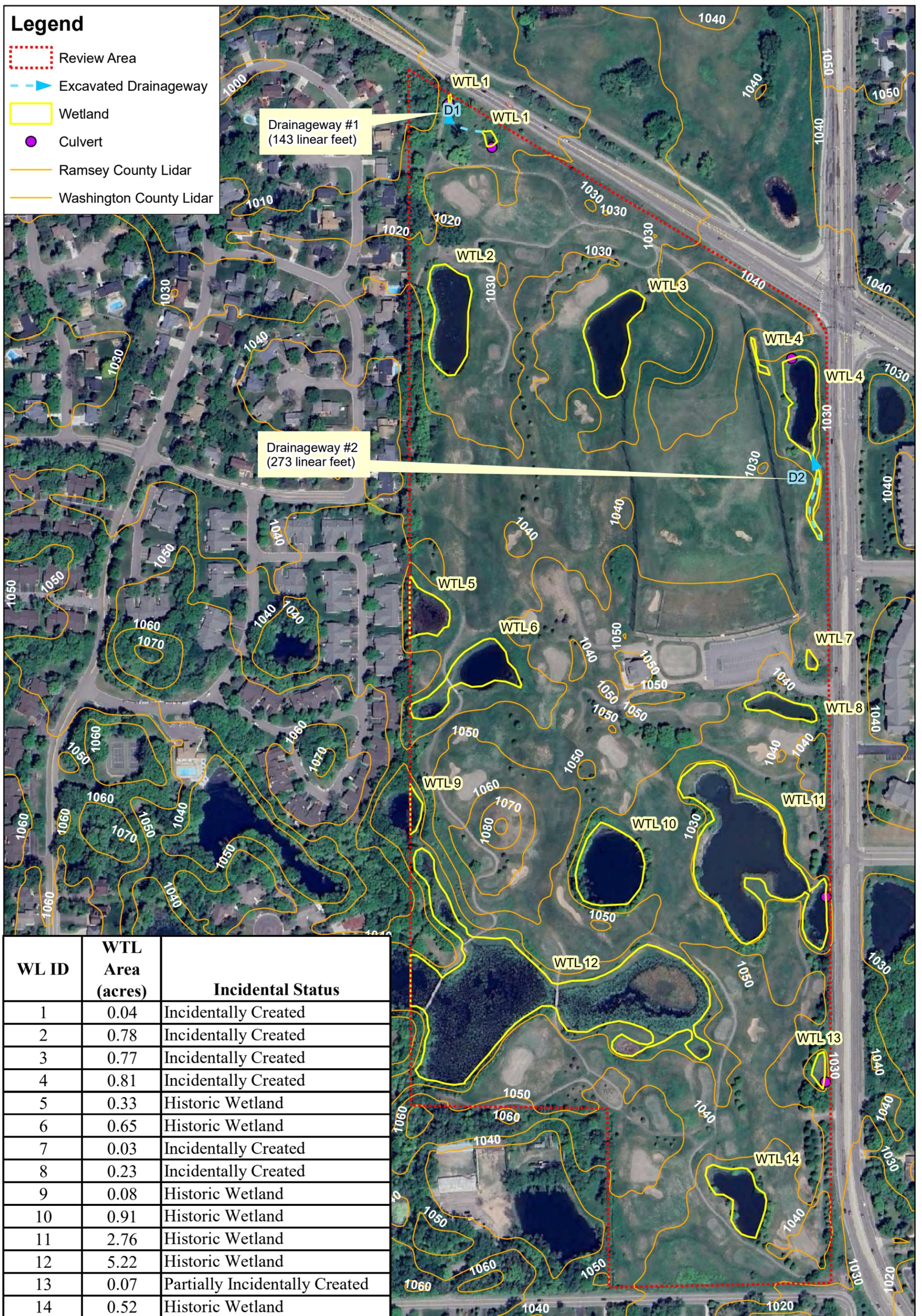
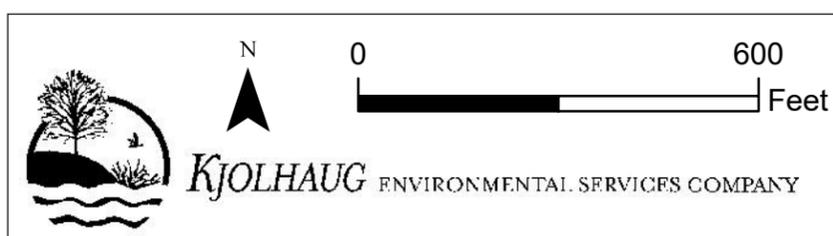


Figure 2A - Existing Conditions (5/25/2023 Google Earth Photo)



**Lower Afton Road (KES 2023-160)
Maplewood, Minnesota**

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

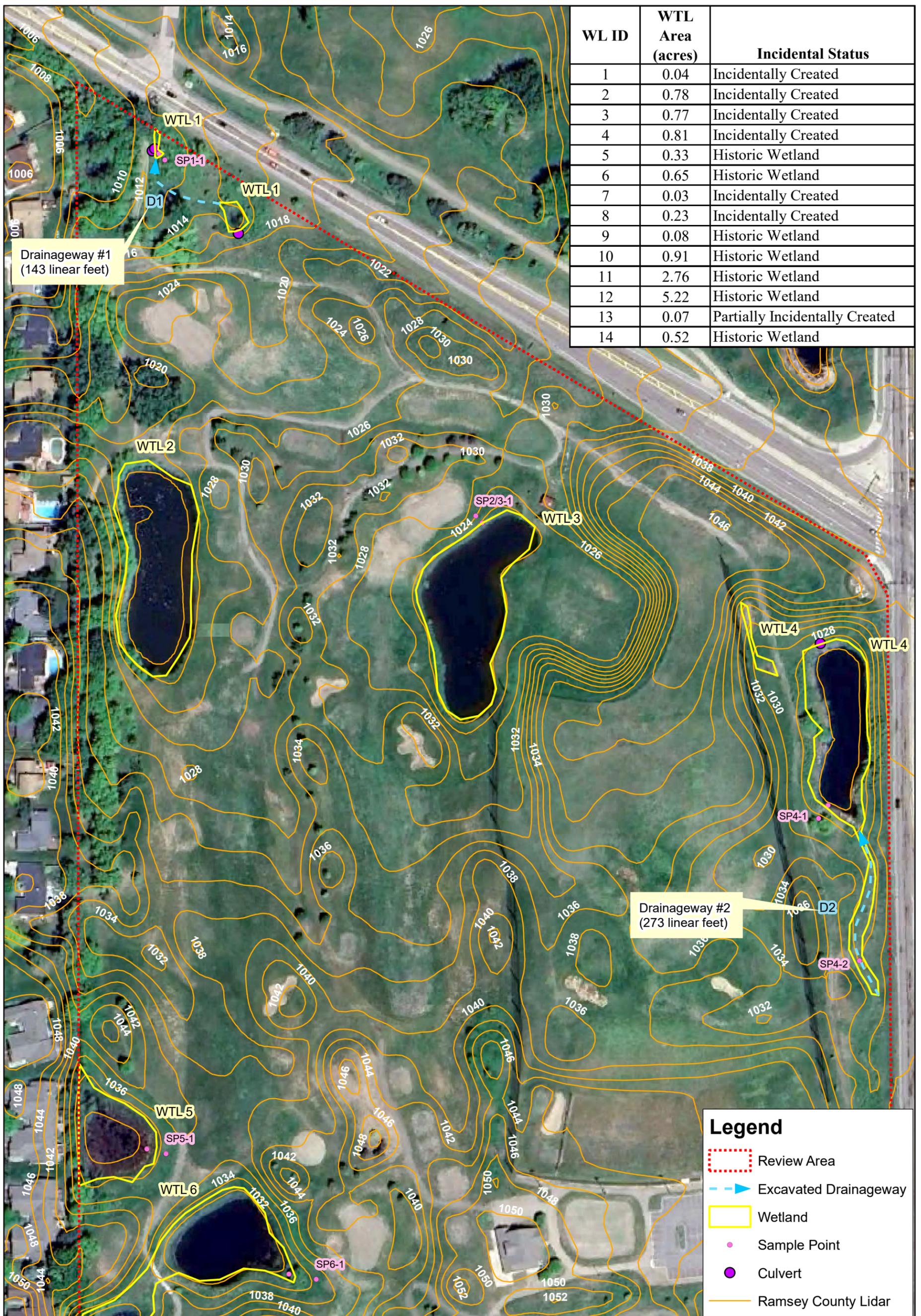


Figure 2B - Existing Conditions North (5/25/2023 Google Earth Photo)

0 600 Feet

Lower Afton Road (KES 2023-160)
Maplewood, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

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Figure 2C - Existing Conditions South (5/25/2023 Google Earth Photo)

N

0 600 Feet

Lower Afton Road (KES 2023-160)
Maplewood, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.



Figure 2C - Existing Conditions South (5/25/2023 Google Earth Photo)

N

0 600

Feet

Lower Afton Road (KES 2023-160)
Maplewood, Minnesota

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Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

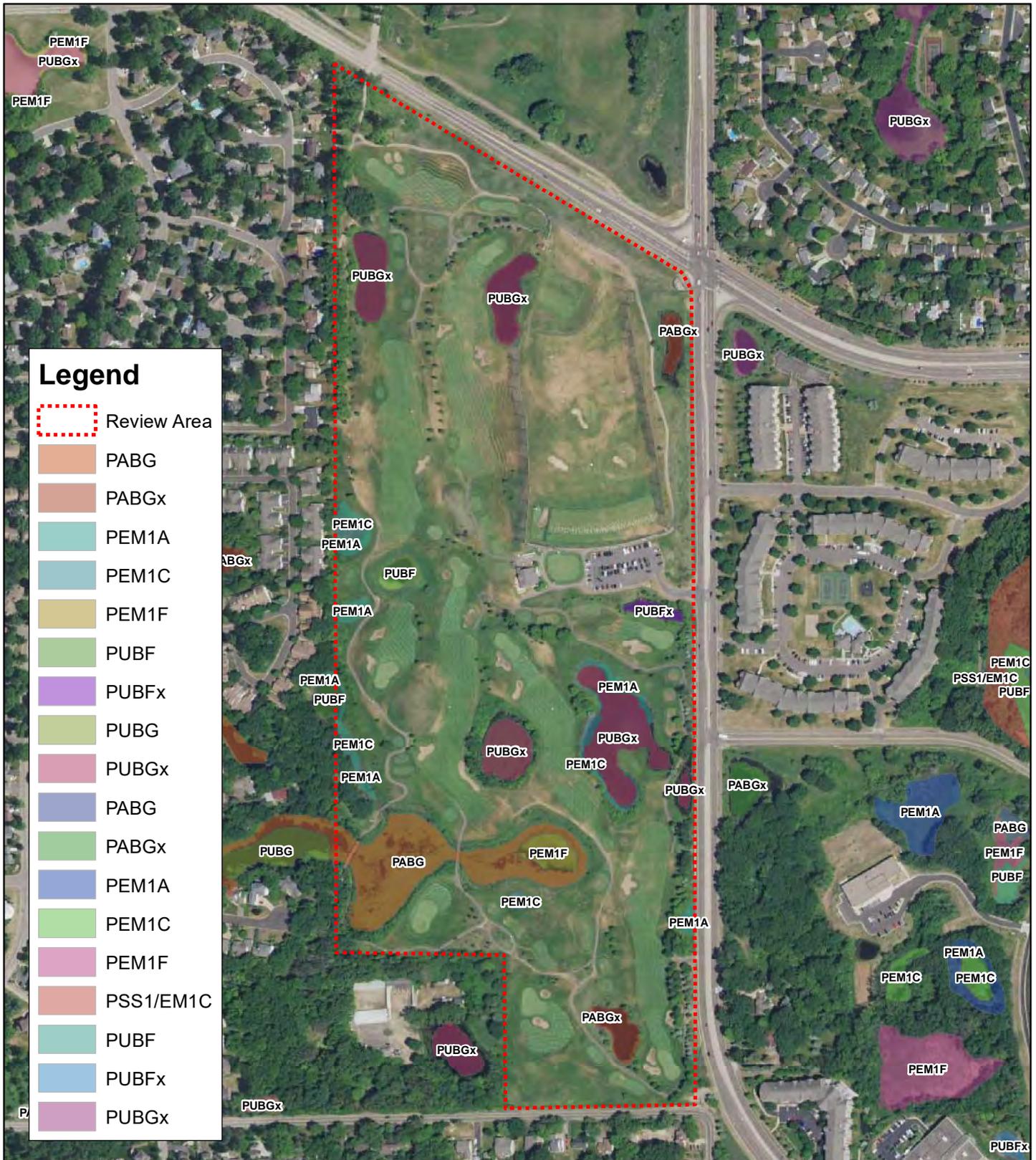


Figure 3 - National Wetlands Inventory



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Source: MNGEO Spatial Commons, USFWS

0 1,000



Feet

Lower Afton Road (KES 2023 -160)
Maplewood, Minnesota

N


Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.



Figure 5 - DNR Public Waters Inventory

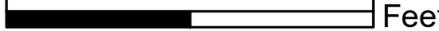


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Source: MNGEO Spatial Commons, MN DNR

N

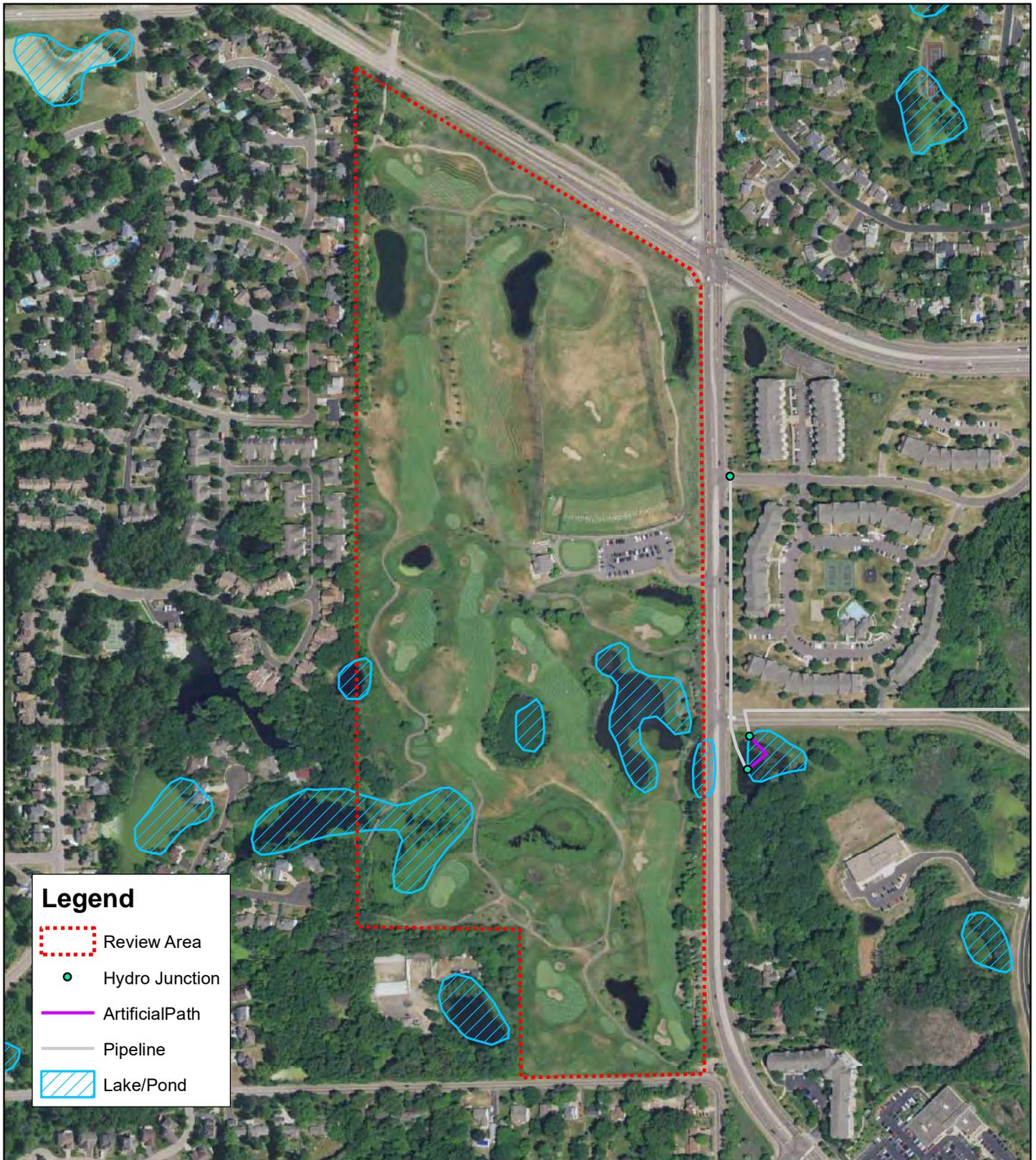


0 2,000 Feet



Lower Afton Road (KES 2023-160)
Maplewood, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.



Legend

- Review Area
- Hydro Junction
- Artificial Path
- Pipeline
- Lake/Pond

Figure 6 - National Hydrography Dataset



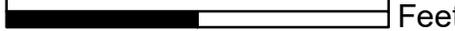
N



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Source: MNGEO Spatial Commons, USGS

0 1,000 Feet



Lower Afton Road (2023 - 160)
Maplewood, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

Lower Afton Road

Wetland Delineation Report

APPENDIX A

Joint Application Form for Activities Affecting Water Resources in Minnesota

PART ONE: Applicant Information

If applicant is an entity (company, government entity, partnership, etc.), an authorized contact person must be identified. If the applicant is using an agent (consultant, lawyer, or other third party) and has authorized them to act on their behalf, the agent's contact information must also be provided.

Applicant/Landowner Name: D. R. Horton, Deb Ridgeway
Mailing Address: 20860 Kenbridge Court, Suite 100, Lakeville, MN 55044
Phone: (952) 985-7864
E-mail Address: dridgeway@drhorton.com

Authorized Contact (do not complete if same as above):

Mailing Address:
Phone:
E-mail Address:

Agent Name: Kjolhaug Environmental Services; c/o Mary Clare McAleer
Mailing Address: 2500 Shadywood Road Excelsior, MN 55331
Phone: (224) 456-7944
E-mail Address: maryclare@kjolhaugenv.com

PART TWO: Site Location Information

County: Ramsey **City/Township:** Maplewood
Parcel ID and/or Address: 122822110002 (297 Century Avenue S) and 122822440002 (2621 Linwood Ave E)
Legal Description (Section, Township, Range): S: 12, T: 28N, R: 22W
Lat/Long (decimal degrees): (44.928513, -92.987635)
Attach a map showing the location of the site in relation to local streets, roads, highways.
Approximate size of site (acres) or if a linear project, length (feet): 177.79 acres

If you know that your proposal will require an individual Permit from the U.S. Army Corps of Engineers, you must provide the names and addresses of all property owners adjacent to the project site. This information may be provided by attaching a list to your application or by using block 25 of the Application for Department of the Army permit which can be obtained at:

http://www.mvp.usace.army.mil/Portals/57/docs/regulatory/RegulatoryDocs/engform_4345_2012oct.pdf

PART THREE: General Project/Site Information

If this application is related to a delineation approval, exemption determination, jurisdictional determination, or other correspondence submitted *prior to* this application then describe that here and provide the Corps of Engineers project number.

Describe the project that is being proposed, the project purpose and need, and schedule for implementation and completion. The project description must fully describe the nature and scope of the proposed activity including a description of all project elements that effect aquatic resources (wetland, lake, tributary, etc.) and must also include plans and cross section or profile drawings showing the location, character, and dimensions of all proposed activities and aquatic resource impacts.

Wetland delineation concurrence/approval. Concurrence on incidental determination for Wetland 1, 2, 3, 4, 7, 8, and portions of 14.

PART FOUR: Aquatic Resource Impact¹ Summary

If your proposed project involves a direct or indirect impact to an aquatic resource (wetland, lake, tributary, etc.) identify each impact in the table below. Include all anticipated impacts, including those expected to be temporary. Attach an overhead view map, aerial photo, and/or drawing showing all of the aquatic resources in the project area and the location(s) of the proposed impacts. Label each aquatic resource on the map with a reference number or letter and identify the impacts in the following table.

Aquatic Resource ID (as noted on overhead view)	Aquatic Resource Type (wetland, lake, tributary etc.)	Type of Impact (fill, excavate, drain, or remove vegetation)	Duration of Impact Permanent (P) or Temporary (T) ¹	Size of Impact ²	Overall Size of Aquatic Resource ³	Existing Plant Community Type(s) in Impact Area ⁴	County, Major Watershed #, and Bank Service Area # of Impact Area ⁵

¹If impacts are temporary; enter the duration of the impacts in days next to the "T". For example, a project with a temporary access fill that would be removed after 220 days would be entered "T (220)".

²Impacts less than 0.01 acre should be reported in square feet. Impacts 0.01 acre or greater should be reported as acres and rounded to the nearest 0.01 acre. Tributary impacts must be reported in linear feet of impact and an area of impact by indicating first the linear feet of impact along the flowline of the stream followed by the area impact in parentheses). For example, a project that impacts 50 feet of a stream that is 6 feet wide would be reported as 50 ft (300 square feet).

³This is generally only applicable if you are applying for a de minimis exemption under MN Rules 8420.0420 Subp. 8, otherwise enter "N/A".

⁴Use *Wetland Plants and Plant Community Types of Minnesota and Wisconsin* 3rd Ed. as modified in MN Rules 8420.0405 Subp. 2.

⁵Refer to Major Watershed and Bank Service Area maps in MN Rules 8420.0522 Subp. 7.

If any of the above identified impacts have already occurred, identify which impacts they are and the circumstances associated with each:

PART FIVE: Applicant Signature

Check here if you are requesting a pre-application consultation with the Corps and LGU based on the information you have provided. Regulatory entities will not initiate a formal application review if this box is checked.

By signature below, I attest that the information in this application is complete and accurate. I further attest that I possess the authority to undertake the work described herein.

Signature:  Date: 11/6/2023

I hereby authorize Kjolhaug Environmental Services to act on my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this application.

¹ The term "impact" as used in this joint application form is a generic term used for disclosure purposes to identify activities that may require approval from one or more regulatory agencies. For purposes of this form it is not meant to indicate whether or not those activities may require mitigation/replacement.

Attachment A

Request for Delineation Review, Wetland Type Determination, or Jurisdictional Determination

By submission of the enclosed wetland delineation report, I am requesting that the U.S. Army Corps of Engineers, St. Paul District (Corps) and/or the Wetland Conservation Act Local Government Unit (LGU) provide me with the following (check all that apply):

Wetland Type Confirmation

Delineation Concurrence. Concurrence with a delineation is a written notification from the Corps and a decision from the LGU concurring, not concurring, or commenting on the boundaries of the aquatic resources delineated on the property. Delineation concurrences are generally valid for five years unless site conditions change. Under this request alone, the Corps will not address the jurisdictional status of the aquatic resources on the property, only the boundaries of the resources within the review area (including wetlands, tributaries, lakes, etc.).

Wetland delineation concurrence/approval. Concurrence on incidental determination for Wetland 1, 2, 3, 4, 7, 8, and portions of 14.

Preliminary Jurisdictional Determination. A preliminary jurisdictional determination (PJD) is a non-binding written indication from the Corps that waters, including wetlands, identified on a parcel may be waters of the United States. For purposes of computation of impacts and compensatory mitigation requirements, a permit decision made on the basis of a PJD will treat all waters and wetlands in the review area as if they are jurisdictional waters of the U.S. PJDs are advisory in nature and may not be appealed.

Approved Jurisdictional Determination. An approved jurisdictional determination (AJD) is an official Corps determination that jurisdictional waters of the United States are either present or absent on the property. AJDs can generally be relied upon by the affected party for five years. An AJD may be appealed through the Corps administrative appeal process.

In order for the Corps and LGU to process your request, the wetland delineation must be prepared in accordance with the 1987 Corps of Engineers Wetland Delineation Manual, any approved Regional Supplements to the 1987 Manual, and the *Guidelines for Submitting Wetland Delineations in Minnesota* (2013).

<http://www.mvp.usace.army.mil/Missions/Regulatory/DelineationJDGuidance.aspx>

Attachment B

Supporting Information for Applications Involving Exemptions, No Loss Determinations, and Activities Not Requiring Mitigation

Complete this part *if* you maintain that the identified aquatic resource impacts in Part Four do not require wetland replacement/compensatory mitigation OR *if* you are seeking verification that the proposed water resource impacts are either exempt from replacement or are not under CWA/WCA jurisdiction.

Identify the specific exemption or no-loss provision for which you believe your project or site qualifies:

Chapter 8420.0105 Subp. 2 D states, "his chapter does not regulate impacts to incidental wetlands. "Incidental wetlands" are wetland areas that the landowner can demonstrate, to the satisfaction of the local government unit, were created in nonwetland areas solely by actions, the purpose of which was not to create the wetland. Incidental wetlands include drainage ditches, impoundments, or excavations constructed in nonwetlands solely for the purpose of effluent treatment, containment of waste material, storm water retention or detention, drainage, soil and water conservation practices, and water quality improvements and not as part of a wetland replacement process that may, over time, take on wetland characteristics."

Provide a detailed explanation of how your project or site qualifies for the above. Be specific and provide and refer to attachments and exhibits that support your contention. Applicants should refer to rules (e.g. WCA rules), guidance documents (e.g. BWSR guidance, Corps guidance letters/public notices), and permit conditions (e.g. Corps General Permit conditions) to determine the necessary information to support the application. Applicants are strongly encouraged to contact the WCA LGU and Corps Project Manager prior to submitting an application if they are unsure of what type of information to provide:

See report. Based on the historical aerial review, the current locations of Wetlands 1, 2, 3, 4, 7, 8, and the northwestern portion of Wetland 14 were upland based on the 1940, 1953, 1985, and 1991 Ramsey County Aerial Photography.

Lower Afton Road

Wetland Delineation Report

APPENDIX B

Wetland Delineation Data Forms

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP1-1UP
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex
 Slope (%): 2-4% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Poskin silt loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>N</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet	
1 _____	_____	_____	_____	Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A)	
2 _____	_____	_____	_____	Total Number of Dominant Species Across all Strata: <u>2</u> (B)	
3 _____	_____	_____	_____	Percent of Dominant Species that are OBL, FACW, or FAC: <u>50.00%</u> (A/B)	
4 _____	_____	_____	_____		
5 _____	_____	_____	_____		
<u>0</u> = Total Cover					
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet	
1 <u>Rhamnus cathartica</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	Total % Cover of:	
2 _____	_____	_____	_____	OBL species <u>0</u> x 1 = <u>0</u>	
3 _____	_____	_____	_____	FACW species <u>0</u> x 2 = <u>0</u>	
4 _____	_____	_____	_____	FAC species <u>25</u> x 3 = <u>75</u>	
5 _____	_____	_____	_____	FACU species <u>45</u> x 4 = <u>180</u>	
<u>15</u> = Total Cover				UPL species <u>0</u> x 5 = <u>0</u>	
				Column totals <u>70</u> (A) <u>255</u> (B)	
				Prevalence Index = B/A = <u>3.64</u>	
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:	
1 <u>Solidago canadensis</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>	____ Rapid test for hydrophytic vegetation	
2 <u>Rhamnus cathartica</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	____ Dominance test is >50%	
3 <u>Cirsium arvense</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	____ Prevalence index is ≤3.0*	
4 _____	_____	_____	_____	____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)	
5 _____	_____	_____	_____	____ Problematic hydrophytic vegetation* (explain)	
6 _____	_____	_____	_____		
7 _____	_____	_____	_____		
8 _____	_____	_____	_____		
9 _____	_____	_____	_____		
10 _____	_____	_____	_____		
<u>55</u> = Total Cover					
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present? <u>N</u>	
1 _____	_____	_____	_____		
2 _____	_____	_____	_____		
<u>0</u> = Total Cover					

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP1-1UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-12	10YR 3/3	100					Loam	
12-24	10YR 3/3	95	10YR 4/6	5	C	M	Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u> N </u></p>
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Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>		<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>		<p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p>	
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<p>Field Observations:</p> <p>Surface water present? Yes _____ No <u> X </u> Depth (inches): _____</p> <p>Water table present? Yes _____ No <u> X </u> Depth (inches): _____</p> <p>Saturation present? Yes _____ No <u> X </u> Depth (inches): _____</p> <p>(includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u> N </u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No free water or saturation observed within 24 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP1-1W
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 0-2% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Poskin silt loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology X significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? present? Yes

SUMMARY OF FINDINGS (If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 1</u>
Hydric soil present? <u>Y</u>	
Indicators of wetland hydrology present? <u>Y</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database. The hydrology has been disturbed by the excavated portion that drains the shallow marsh portion of Wetland 1. The excavation now represent normal circumstances.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet	
1 _____	_____	_____	_____	Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A)	
2 _____	_____	_____	_____	Total Number of Dominant Species Across all Strata: <u>1</u> (B)	
3 _____	_____	_____	_____	Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)	
4 _____	_____	_____	_____		
5 _____	_____	_____	_____		
<u>0</u> = Total Cover					
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet	
1 _____	_____	_____	_____	Total % Cover of:	
2 _____	_____	_____	_____	OBL species <u>5</u> x 1 = <u>5</u>	
3 _____	_____	_____	_____	FACW species <u>80</u> x 2 = <u>160</u>	
4 _____	_____	_____	_____	FAC species <u>0</u> x 3 = <u>0</u>	
5 _____	_____	_____	_____	FACU species <u>15</u> x 4 = <u>60</u>	
<u>0</u> = Total Cover				UPL species <u>0</u> x 5 = <u>0</u>	
				Column totals <u>100</u> (A) <u>225</u> (B)	
				Prevalence Index = B/A = <u>2.25</u>	
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:	
1 <u>Phalaris arundinacea</u>	<u>80</u>	<u>Y</u>	<u>FACW</u>	____ Rapid test for hydrophytic vegetation	
2 <u>Solidago canadensis</u>	<u>15</u>	<u>N</u>	<u>FACU</u>	<u>X</u> Dominance test is >50%	
3 <u>Lycopus uniflorus</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	<u>X</u> Prevalence index is ≤3.0*	
4 _____	_____	_____	_____	____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)	
5 _____	_____	_____	_____	____ Problematic hydrophytic vegetation* (explain)	
6 _____	_____	_____	_____	____	
7 _____	_____	_____	_____	____	
8 _____	_____	_____	_____	____	
9 _____	_____	_____	_____	____	
10 _____	_____	_____	_____	____	
<u>100</u> = Total Cover				*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present? <u>Y</u>	
1 _____	_____	_____	_____		
2 _____	_____	_____	_____		
<u>0</u> = Total Cover					

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP1-1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-8	10YR 2/2	85	10YR 4/6	15	C	M	Silty Loam	
8-16	10YR 2/1	95	10YR 4/6	5	C	M	Clay Loam	
16-24	10YR 2/2	100					Silty Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input checked="" type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u>Y</u></p>
--	---

Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>	<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input checked="" type="checkbox"/> Geomorphic Position (D2)</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</p>
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<p>Field Observations:</p> <p>Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water table present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u>Y</u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No free water or saturation observed within 24 inches of soil surface. The shallow marsh portion had approximately 3 inches of surface water.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP2/3-1Up
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear
 Slope (%): 2-6% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Santiago silt loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
 (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>N</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet	
1 _____	_____	_____	_____	Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A)	
2 _____	_____	_____	_____	Total Number of Dominant Species Across all Strata: <u>2</u> (B)	
3 _____	_____	_____	_____	Percent of Dominant Species that are OBL, FACW, or FAC: <u>50.00%</u> (A/B)	
4 _____	_____	_____	_____		
5 _____	_____	_____	_____		
<u>0</u> = Total Cover					
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet	
1 _____	_____	_____	_____	Total % Cover of:	
2 _____	_____	_____	_____	OBL species <u>0</u> x 1 = <u>0</u>	
3 _____	_____	_____	_____	FACW species <u>0</u> x 2 = <u>0</u>	
4 _____	_____	_____	_____	FAC species <u>50</u> x 3 = <u>150</u>	
5 _____	_____	_____	_____	FACU species <u>50</u> x 4 = <u>200</u>	
<u>0</u> = Total Cover				UPL species <u>0</u> x 5 = <u>0</u>	
<u>0</u> = Total Cover				Column totals <u>100</u> (A) <u>350</u> (B)	
<u>100</u> = Total Cover				Prevalence Index = B/A = <u>3.50</u>	
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:	
1 <u>Poa pratensis</u>	<u>50</u>	<u>Y</u>	<u>FAC</u>	____ Rapid test for hydrophytic vegetation	
2 <u>Solidago canadensis</u>	<u>25</u>	<u>Y</u>	<u>FACU</u>	____ Dominance test is >50%	
3 <u>Monarda fistulosa</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	____ Prevalence index is ≤3.0*	
4 <u>Schizachyrium scoparium</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)	
5 <u>Bouteloua dactyloides</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	____ Problematic hydrophytic vegetation* (explain)	
6 _____	_____	_____	_____	____	
7 _____	_____	_____	_____	____	
8 _____	_____	_____	_____	____	
9 _____	_____	_____	_____	____	
10 _____	_____	_____	_____	____	
<u>100</u> = Total Cover				*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present? <u>N</u>	
1 _____	_____	_____	_____		
2 _____	_____	_____	_____		
<u>0</u> = Total Cover					

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP2/3-1Up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-12	10YR 2/2	100					Clay loam	
12-24	10YR 2/2	90	10YR 4/6	10	C	M	Sandy loam	Gravel inclusions

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- Coast Prairie Redox (A16) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Very Shallow Dark Surface (TF12)
- Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric soil present? N

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface water present? Yes _____ No X Depth (inches): _____
 Water table present? Yes _____ No X Depth (inches): _____
 Saturation present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No free water or saturation observed within 24 inches of the soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP2/3-1W
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 1 to 3% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Santiago silt loam NWI Classification: PUBGx

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? present? Yes
SUMMARY OF FINDINGS (If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 2/3</u>
Hydric soil present? <u>Y</u>	
Indicators of wetland hydrology present? <u>Y</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u>	(Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1					Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across all Strata: <u>1</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
2					
3					
4					
5					
		<u>0</u>	= Total Cover		
<u>Sapling/Shrub stratum</u>	(Plot size: <u>15 ft.</u>)				Prevalence Index Worksheet
1					Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>90</u> x 2 = <u>180</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>90</u> (A) <u>180</u> (B) Prevalence Index = B/A = <u>2.00</u>
2					
3					
4					
5					
		<u>0</u>	= Total Cover		
<u>Herb stratum</u>	(Plot size: <u>5 ft.</u>)				Hydrophytic Vegetation Indicators:
1	<u>Phalaris arundinacea</u>	<u>80</u>	<u>Y</u>	<u>FACW</u>	_____ Rapid test for hydrophytic vegetation <input checked="" type="checkbox"/> Dominance test is >50% <input checked="" type="checkbox"/> Prevalence index is ≤3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
2	<u>Salix interior</u>	<u>10</u>	<u>N</u>	<u>FACW</u>	
3					
4					
5					
6					
7					
8					
9					
10					
		<u>90</u>	= Total Cover		
<u>Woody vine stratum</u>	(Plot size: <u>30 ft.</u>)				Hydrophytic vegetation present? <u>Y</u>
1					
2					
		<u>0</u>	= Total Cover		

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP2/3-1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-6	10YR 2/2	100					Loam	
6-16	10YR 2/2	95	10YR 4/6	5	C	M	Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input checked="" type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u>Y</u></p>
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Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>		<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input checked="" type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input checked="" type="checkbox"/> Geomorphic Position (D2)</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</p>
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<p>Field Observations:</p> <p>Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water table present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>12</u></p> <p>Saturation present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>12</u></p> <p>(includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u>Y</u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Free water observed within 12 inches of the soil surface. Surface water was observed within the center of the basin.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP4-1Up
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear
 Slope (%): 2 to 4% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Comstock silt loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
 (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>N</u>	Is the sampled area within a wetland? <u>N</u>
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	
If yes, optional wetland site ID: _____	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1 <u>Betula papyrifera</u>	10	Y	FACU	Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A)
2 _____	_____	_____	_____	Total Number of Dominant Species Across all Strata: <u>3</u> (B)
3 _____	_____	_____	_____	Percent of Dominant Species that are OBL, FACW, or FAC: <u>33.33%</u> (A/B)
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
10 = Total Cover				
Sapling/Shrub stratum (Plot size: <u>15 ft.</u>)				
1 _____	_____	_____	_____	Prevalence Index Worksheet Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>3</u> x 2 = <u>6</u> FAC species <u>60</u> x 3 = <u>180</u> FACU species <u>60</u> x 4 = <u>240</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>123</u> (A) <u>426</u> (B) Prevalence Index = B/A = <u>3.46</u>
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
0 = Total Cover				
Herb stratum (Plot size: <u>5 ft.</u>)				
1 <u>Poa pratensis</u>	60	Y	FAC	Hydrophytic Vegetation Indicators: _____ Rapid test for hydrophytic vegetation _____ Dominance test is >50% _____ Prevalence index is ≤3.0* _____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) _____ Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
2 <u>Lotus corniculatus</u>	30	Y	FACU	
3 <u>Schizachyrium scoparium</u>	15	N	FACU	
4 <u>Solidago canadensis</u>	5	N	FACU	
5 <u>Symphotrichum novae-angliae</u>	3	N	FACW	
6 _____	_____	_____	_____	
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
9 _____	_____	_____	_____	
10 _____	_____	_____	_____	
113 = Total Cover				
Woody vine stratum (Plot size: <u>30 ft.</u>)				
1 _____	_____	_____	_____	Hydrophytic vegetation present? <u>N</u>
2 _____	_____	_____	_____	
0 = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP4-1Up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-12	10YR 3/1	100					Silty loam	
12-24	10YR 3/3	95	10Y/R 4/6	5	C	M	Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- Coast Prairie Redox (A16) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Very Shallow Dark Surface (TF12)
- Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric soil present? N

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)

- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface water present? Yes _____ No X Depth (inches): _____
 Water table present? Yes _____ No X Depth (inches): _____
 Saturation present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No free water or saturation observed within 24 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP4-1W
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 1-3% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Comstock silt loam NWI Classification: PABGx

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
 (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 4</u>
Hydric soil present? <u>Y</u>	
Indicators of wetland hydrology present? <u>Y</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	Total Number of Dominant Species Across all Strata: <u>1</u> (B)
3 _____	_____	_____	_____	Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
0 = Total Cover				
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	OBL species <u>5</u> x 1 = <u>5</u>
3 _____	_____	_____	_____	FACW species <u>103</u> x 2 = <u>206</u>
4 _____	_____	_____	_____	FAC species <u>0</u> x 3 = <u>0</u>
5 _____	_____	_____	_____	FACU species <u>0</u> x 4 = <u>0</u>
_____	_____	_____	_____	UPL species <u>0</u> x 5 = <u>0</u>
_____	_____	_____	_____	Column totals <u>108</u> (A) <u>211</u> (B)
_____	_____	_____	_____	Prevalence Index = B/A = <u>1.95</u>
0 = Total Cover				
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators: _____ Rapid test for hydrophytic vegetation <input checked="" type="checkbox"/> Dominance test is >50% <input checked="" type="checkbox"/> Prevalence index is ≤3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
1 <u>Phalaris arundinacea</u>	70	Y	FACW	
2 <u>Salix interior</u>	20	N	FACW	
3 <u>Cornus sericea</u>	10	N	FACW	
4 <u>Typha angustifolia</u>	5	N	OBL	
5 <u>Symphotrichum novae-angliae</u>	3	N	FACW	
6 _____	_____	_____	_____	
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
9 _____	_____	_____	_____	
10 _____	_____	_____	_____	
108 = Total Cover				
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
0 = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP4-1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-4	10YR 2/1	100					Muck	
4-18	10YR 4/2	90	10Y/R 4/6	10	C	M	Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input checked="" type="checkbox"/> 2 cm Muck (A10)</p> <p><input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u>Y</u></p>
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Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input checked="" type="checkbox"/> High Water Table (A2)</p> <p><input checked="" type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>		<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input checked="" type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input checked="" type="checkbox"/> Geomorphic Position (D2)</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</p>
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<p>Field Observations:</p> <p>Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water table present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>8</u></p> <p>Saturation present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>8</u></p> <p>(includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u>Y</u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Free water observed 8 inches from the soil surface. Surface water present in the center of the basin.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP4-2W
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 1-3% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Comstock silt loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
 (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>Y</u> Hydric soil present? <u>Y</u> Indicators of wetland hydrology present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 4</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1 _____	_____	_____	_____	Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across all Strata: <u>1</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>0</u> = Total Cover				Prevalence Index Worksheet Total % Cover of: OBL species <u>14</u> x 1 = <u>14</u> FACW species <u>80</u> x 2 = <u>160</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>94</u> (A) <u>174</u> (B) Prevalence Index = B/A = <u>1.85</u>
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>0</u> = Total Cover				
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	
1 <u>Phalaris arundinacea</u>	<u>80</u>	<u>Y</u>	<u>FACW</u>	
2 <u>Scirpus cyperinus</u>	<u>7</u>	<u>N</u>	<u>OBL</u>	
3 <u>Calamagrostis canadensis</u>	<u>7</u>	<u>N</u>	<u>OBL</u>	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
6 _____	_____	_____	_____	
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
9 _____	_____	_____	_____	
10 _____	_____	_____	_____	
<u>94</u> = Total Cover				
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
<u>0</u> = Total Cover				

Hydrophytic Vegetation Indicators:
 _____ Rapid test for hydrophytic vegetation
 Dominance test is >50%
 Prevalence index is ≤3.0*
 _____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
 _____ Problematic hydrophytic vegetation* (explain)
 *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP4-2W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-6	10YR 2/2	100					Clay loam	
6-18	10YR 3/2	95	10YR 4/6	5	C	M	Clay loam	
18-24	10YR 3/2	70	10YR 4/6	30	C	M	Clay	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input checked="" type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u>Y</u></p>
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Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>	<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input checked="" type="checkbox"/> Geomorphic Position (D2)</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</p>
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<p>Field Observations:</p> <p>Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water table present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u>Y</u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No free water or saturation observed within 24 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP5-1Up
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear
 Slope (%): 5-8% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Duluth silt loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
 (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>N</u>	Is the sampled area within a wetland? <u>N</u> if yes, optional wetland site ID: _____
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet	
1 _____	_____	_____	_____	Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A)	
2 _____	_____	_____	_____	Total Number of Dominant Species Across all Strata: <u>2</u> (B)	
3 _____	_____	_____	_____	Percent of Dominant Species that are OBL, FACW, or FAC: <u>50.00%</u> (A/B)	
4 _____	_____	_____	_____		
5 _____	_____	_____	_____		
<u>0</u> = Total Cover					
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet	
1 _____	_____	_____	_____	Total % Cover of:	
2 _____	_____	_____	_____	OBL species <u>0</u> x 1 = <u>0</u>	
3 _____	_____	_____	_____	FACW species <u>30</u> x 2 = <u>60</u>	
4 _____	_____	_____	_____	FAC species <u>0</u> x 3 = <u>0</u>	
5 _____	_____	_____	_____	FACU species <u>70</u> x 4 = <u>280</u>	
<u>0</u> = Total Cover				UPL species <u>0</u> x 5 = <u>0</u>	
<u>0</u> = Total Cover				Column totals <u>100</u> (A) <u>340</u> (B)	
<u>0</u> = Total Cover				Prevalence Index = B/A = <u>3.40</u>	
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:	
1 <u>Solidago canadensis</u>	<u>70</u>	<u>Y</u>	<u>FACU</u>	____ Rapid test for hydrophytic vegetation	
2 <u>Phalaris arundinacea</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	____ Dominance test is >50%	
3 _____	_____	_____	_____	____ Prevalence index is ≤3.0*	
4 _____	_____	_____	_____	____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)	
5 _____	_____	_____	_____	____ Problematic hydrophytic vegetation* (explain)	
6 _____	_____	_____	_____	____	
7 _____	_____	_____	_____	____	
8 _____	_____	_____	_____	____	
9 _____	_____	_____	_____	____	
10 _____	_____	_____	_____	____	
<u>100</u> = Total Cover				*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present? <u>N</u>	
1 _____	_____	_____	_____		
2 _____	_____	_____	_____		
<u>0</u> = Total Cover					

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP5-1Up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-14	10YR 3/2	100					Loam	
14-24	10YR 4/1	95	10YR 4/4	5	C	M	Clay loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u> N </u></p>
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Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p>		
<p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>	<p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p>

<p>Field Observations:</p> <p>Surface water present? Yes _____ No <u> X </u> Depth (inches): _____</p> <p>Water table present? Yes _____ No <u> X </u> Depth (inches): _____</p> <p>Saturation present? Yes _____ No <u> X </u> Depth (inches): _____ (includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u> N </u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No free water or saturation observed within 24 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP5-1W
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 0-3% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Duluth silt loam NWI Classification: PEM1C/A

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? present? Yes
SUMMARY OF FINDINGS (If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>Y</u> Hydric soil present? <u>Y</u> Indicators of wetland hydrology present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 5</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1 _____	_____	_____	_____	Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across all Strata: <u>1</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>0</u> = Total Cover				Prevalence Index Worksheet Total % Cover of: OBL species <u>5</u> x 1 = <u>5</u> FACW species <u>100</u> x 2 = <u>200</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>105</u> (A) <u>205</u> (B) Prevalence Index = B/A = <u>1.95</u>
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)				
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>0</u> = Total Cover				
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)				
1 <u>Phalaris arundinacea</u>	<u>100</u>	<u>Y</u>	<u>FACW</u>	
2 <u>Bolboschoenus fluviatilis</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
6 _____	_____	_____	_____	
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
9 _____	_____	_____	_____	
10 _____	_____	_____	_____	
<u>105</u> = Total Cover				
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)				
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
<u>0</u> = Total Cover				

Hydrophytic Vegetation Indicators:
 _____ Rapid test for hydrophytic vegetation
 Dominance test is >50%
 Prevalence index is ≤3.0*
 _____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
 _____ Problematic hydrophytic vegetation* (explain)
 *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP5-1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-7	10YR 2/1	100					Loam	
7-14	10YR 5/1	100					Sandy clay loam	
14-24	10YR 5/1	85	10YR 4/6	15	C	M	Sandy clay loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input checked="" type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u>Y</u></p>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
<p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>	<p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input checked="" type="checkbox"/> Geomorphic Position (D2)</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</p>

<p>Field Observations:</p> <p>Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water table present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u>Y</u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No free water or saturation observed within 24 inches of the soil surface. About 3 inches of surface water present in the center of the basin.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP6-1Up
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear
 Slope (%): 4 to 7% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Duluth silt loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
 (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>N</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	Total Number of Dominant Species Across all Strata: <u>2</u> (B)
3 _____	_____	_____	_____	Percent of Dominant Species that are OBL, FACW, or FAC: <u>50.00%</u> (A/B)
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>0</u> = Total Cover				
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	OBL species <u>0</u> x 1 = <u>0</u>
3 _____	_____	_____	_____	FACW species <u>50</u> x 2 = <u>100</u>
4 _____	_____	_____	_____	FAC species <u>10</u> x 3 = <u>30</u>
5 _____	_____	_____	_____	FACU species <u>30</u> x 4 = <u>120</u>
_____	_____	_____	_____	UPL species <u>20</u> x 5 = <u>100</u>
<u>0</u> = Total Cover				Column totals <u>110</u> (A) <u>350</u> (B)
<u>110</u> = Total Cover				Prevalence Index = B/A = <u>3.18</u>
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators: _____ Rapid test for hydrophytic vegetation _____ Dominance test is >50% _____ Prevalence index is ≤3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
1 <u>Phalaris arundinacea</u>	<u>50</u>	<u>Y</u>	<u>FACW</u>	
2 <u>Cirsium arvense</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	
3 <u>Tanacetum vulgare</u>	<u>15</u>	<u>N</u>	<u>UPL</u>	
4 <u>Solidago canadensis</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	
5 <u>Poa pratensis</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	
6 <u>Centaurea stoebe</u>	<u>5</u>	<u>N</u>	<u>UPL</u>	
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
9 _____	_____	_____	_____	
10 _____	_____	_____	_____	
<u>110</u> = Total Cover				
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present? <u>N</u>
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
<u>0</u> = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP6-1Up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-4	10YR 3/2	100					Loam	
4-12	10YR 4/4	100					Loam	Restricted= Compaction

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: <u>Compacted</u></p> <p>Depth (inches): <u>12</u></p>	<p>Hydric soil present? <u>N</u></p>
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Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>		<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p>
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<p>Field Observations:</p> <p>Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X Depth (inches): _____</p> <p>Water table present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X Depth (inches): _____</p> <p>Saturation present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X Depth (inches): _____ (includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u>N</u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No free water or saturation observed within 12 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP6-1W
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 4 to 7% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Duluth silt loam NWI Classification: PEM1A

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? present? Yes
SUMMARY OF FINDINGS (If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>Y</u> Hydric soil present? <u>Y</u> Indicators of wetland hydrology present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 6</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1 _____	_____	_____	_____	Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across all Strata: <u>1</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>0</u> = Total Cover				Prevalence Index Worksheet Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>85</u> x 2 = <u>170</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>15</u> x 4 = <u>60</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>100</u> (A) <u>230</u> (B) Prevalence Index = B/A = <u>2.30</u>
Sapling/Shrub stratum (Plot size: <u>15 ft.</u>)				
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>0</u> = Total Cover				
Herb stratum (Plot size: <u>5 ft.</u>)				
1 <u>Phalaris arundinacea</u>	<u>75</u>	<u>Y</u>	<u>FACW</u>	
2 <u>Cirsium arvense</u>	<u>15</u>	<u>N</u>	<u>FACU</u>	
3 <u>Verbena hastata</u>	<u>10</u>	<u>N</u>	<u>FACW</u>	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
6 _____	_____	_____	_____	
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
9 _____	_____	_____	_____	
10 _____	_____	_____	_____	
<u>100</u> = Total Cover				
Woody vine stratum (Plot size: <u>30 ft.</u>)				
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
<u>0</u> = Total Cover				
Hydrophytic Vegetation Indicators: _____ Rapid test for hydrophytic vegetation <u>X</u> Dominance test is >50% <u>X</u> Prevalence index is ≤3.0* _____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) _____ Problematic hydrophytic vegetation* (explain)				
*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic				
Hydrophytic vegetation present? <u>Y</u>				

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP6-1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-4	10YR 3/2	100					Loam	
4-10	10YR 4/2	80	10YR 4/6	20	C	M	Clay Loam	
10-14	10YR 4/2	70	10YR 4/6	30	C	M	Clay Loam	
14-22	10YR 2/1						Sandy Loam	Burried A Horizon
22-24	10YR 5/1	98	10YR 4/6	2	C	M	Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u>Y</u></p>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

<p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>	<p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input checked="" type="checkbox"/> Geomorphic Position (D2)</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</p>
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<p>Field Observations:</p> <p>Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water table present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u>Y</u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No free water or saturation observed within 24 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP7-1Up
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear
 Slope (%): 3 to 8% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Santiago silt loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
 (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet	
1 _____	_____	_____	_____	Number of Dominant Species that are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across all Strata: <u>2</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)	
2 _____	_____	_____	_____		
3 _____	_____	_____	_____		
4 _____	_____	_____	_____		
5 _____	_____	_____	_____		
<u>0</u> = Total Cover				Prevalence Index Worksheet	
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)					Total % Cover of:
1 <u>Salix interior</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>		OBL species <u>0</u> x 1 = <u>0</u>
2 _____	_____	_____	_____		FACW species <u>25</u> x 2 = <u>50</u>
3 _____	_____	_____	_____		FAC species <u>80</u> x 3 = <u>240</u>
4 _____	_____	_____	_____	FACU species <u>0</u> x 4 = <u>0</u>	
5 _____	_____	_____	_____	UPL species <u>0</u> x 5 = <u>0</u>	
<u>15</u> = Total Cover				Column totals <u>105</u> (A) <u>290</u> (B)	
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)				Prevalence Index = B/A = <u>2.76</u>	
1 <u>Poa pratensis</u>	<u>70</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: _____ Rapid test for hydrophytic vegetation <input checked="" type="checkbox"/> Dominance test is >50% <input checked="" type="checkbox"/> Prevalence index is ≤3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
2 <u>Andropogon gerardii</u>	<u>10</u>	<u>N</u>	<u>FAC</u>		
3 <u>Pycnanthemum virginianum</u>	<u>10</u>	<u>N</u>	<u>FACW</u>		
4 _____	_____	_____	_____		
5 _____	_____	_____	_____		
6 _____	_____	_____	_____		
7 _____	_____	_____	_____		
8 _____	_____	_____	_____		
9 _____	_____	_____	_____		
10 _____	_____	_____	_____		
<u>90</u> = Total Cover					
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)					
1 _____	_____	_____	_____		
2 _____	_____	_____	_____		
<u>0</u> = Total Cover				Hydrophytic vegetation present? <u>Y</u>	

Remarks: (Include photo numbers here or on a separate sheet)
 All but one species FAC or drier.

SOIL

Sampling Point: SP7-1Up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-10	10YR 3/2	100					Loam	
10-24	10YR 4/6	100					Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u> N </u></p>
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Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>		<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p>
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<p>Field Observations:</p> <p>Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X Depth (inches): _____</p> <p>Water table present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X Depth (inches): _____</p> <p>Saturation present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X Depth (inches): _____</p> <p>(includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u> N </u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No free water or saturation observed within 24 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP7-1W
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 0 to 2% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Santiago silt loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
 (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 7</u>
Hydric soil present? <u>Y</u>	
Indicators of wetland hydrology present? <u>Y</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1	_____	_____	_____	_____	Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across all Strata: <u>1</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
2	_____	_____	_____	_____	
3	_____	_____	_____	_____	
4	_____	_____	_____	_____	
5	_____	_____	_____	_____	
		<u>0</u>	= Total Cover		
Sapling/Shrub stratum	(Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet
1	_____	_____	_____	_____	Total % Cover of: OBL species <u>5</u> x 1 = <u>5</u> FACW species <u>100</u> x 2 = <u>200</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>105</u> (A) <u>205</u> (B) Prevalence Index = B/A = <u>1.95</u>
2	_____	_____	_____	_____	
3	_____	_____	_____	_____	
4	_____	_____	_____	_____	
5	_____	_____	_____	_____	
		<u>0</u>	= Total Cover		
Herb stratum	(Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:
1	<u>Phalaris arundinacea</u>	<u>95</u>	<u>Y</u>	<u>FACW</u>	_____ Rapid test for hydrophytic vegetation <input checked="" type="checkbox"/> Dominance test is >50% <input checked="" type="checkbox"/> Prevalence index is ≤3.0* _____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) _____ Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
2	<u>Persicaria pensylvanica</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	
3	<u>Scirpus cyperinus</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	
4	_____	_____	_____	_____	
5	_____	_____	_____	_____	
6	_____	_____	_____	_____	
7	_____	_____	_____	_____	
8	_____	_____	_____	_____	
9	_____	_____	_____	_____	
10	_____	_____	_____	_____	
		<u>105</u>	= Total Cover		
Woody vine stratum	(Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present?
1	_____	_____	_____	_____	<u>Y</u>
2	_____	_____	_____	_____	
		<u>0</u>	= Total Cover		

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP7-1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-12	10YR 4/2	85	10YR 4/6	15	C	M	Clay loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- Coast Prairie Redox (A16) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Very Shallow Dark Surface (TF12)
- Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric soil present? Y

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface water present? Yes No Depth (inches): _____
 Water table present? Yes No Depth (inches): 8
 Saturation present? Yes No Depth (inches): 8
 (includes capillary fringe)

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Water table present at 8 inches below soil surface. About 2" of surface water present in the center of the basin.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP8-1Up
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear
 Slope (%): 3-5% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Duluth silt loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
SUMMARY OF FINDINGS (If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1					Number of Dominant Species that are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across all Strata: <u>3</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
2					
3					
4					
5					
		<u>0</u>	= Total Cover		Prevalence Index Worksheet Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>30</u> x 2 = <u>60</u> FAC species <u>60</u> x 3 = <u>180</u> FACU species <u>20</u> x 4 = <u>80</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>110</u> (A) <u>320</u> (B) Prevalence Index = B/A = <u>2.91</u>
Sapling/Shrub stratum	(Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	
1	<u>Cornus alba</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	
2					
3					
4					
5					
		<u>30</u>	= Total Cover		
Herb stratum	(Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	
1	<u>Poa pratensis</u>	<u>40</u>	<u>Y</u>	<u>FAC</u>	
2	<u>Andropogon gerardii</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	
3	<u>Solidago canadensis</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	
4	<u>Monarda fistulosa</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	
5					
6					
7					
8					
9					
10					
		<u>80</u>	= Total Cover		
Woody vine stratum	(Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	
1					
2					
		<u>0</u>	= Total Cover		

Hydrophytic Vegetation Indicators:
 _____ Rapid test for hydrophytic vegetation
 Dominance test is >50%
 Prevalence index is ≤3.0*
 _____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
 _____ Problematic hydrophytic vegetation* (explain)
 *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)
 All but one species FAC or drier.

SOIL

Sampling Point: SP8-1Up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-14	10YR 3/2						Loam	
14-24	10YR 4/4						Sandy Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- Coast Prairie Redox (A16) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Very Shallow Dark Surface (TF12)
- Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric soil present? N

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface water present? Yes _____ No X Depth (inches): _____
 Water table present? Yes _____ No X Depth (inches): _____
 Saturation present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No free water or saturation observed within 24 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP8-1W
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 1-3% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Duluth silt loam NWI Classification: PUBFx

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
SUMMARY OF FINDINGS (If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 8</u>
Hydric soil present? <u>Y</u>	
Indicators of wetland hydrology present? <u>Y</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet	
1 _____	_____	_____	_____	Number of Dominant Species that are OBL, FACW, or FAC: <u>2</u> (A)	
2 _____	_____	_____	_____	Total Number of Dominant Species Across all Strata: <u>2</u> (B)	
3 _____	_____	_____	_____	Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)	
4 _____	_____	_____	_____		
5 _____	_____	_____	_____		
<u>0</u> = Total Cover					
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet	
1 _____	_____	_____	_____	Total % Cover of:	
2 _____	_____	_____	_____	OBL species <u>20</u> x 1 = <u>20</u>	
3 _____	_____	_____	_____	FACW species <u>60</u> x 2 = <u>120</u>	
4 _____	_____	_____	_____	FAC species <u>0</u> x 3 = <u>0</u>	
5 _____	_____	_____	_____	FACU species <u>0</u> x 4 = <u>0</u>	
_____	_____	_____	_____	UPL species <u>0</u> x 5 = <u>0</u>	
_____	_____	_____	_____	Column totals <u>80</u> (A) <u>140</u> (B)	
<u>0</u> = Total Cover				Prevalence Index = B/A = <u>1.75</u>	
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:	
1 <u>Phalaris arundinacea</u>	<u>40</u>	<u>Y</u>	<u>FACW</u>	Rapid test for hydrophytic vegetation	
2 <u>Salix interior</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	<input checked="" type="checkbox"/> Dominance test is >50%	
3 <u>Typha angustifolia</u>	<u>15</u>	<u>N</u>	<u>OBL</u>	<input checked="" type="checkbox"/> Prevalence index is ≤3.0*	
4 <u>Scirpus cyperinus</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)	
5 _____	_____	_____	_____	Problematic hydrophytic vegetation* (explain)	
6 _____	_____	_____	_____		
7 _____	_____	_____	_____		
8 _____	_____	_____	_____		
9 _____	_____	_____	_____		
10 _____	_____	_____	_____		
<u>80</u> = Total Cover				*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present? <u>Y</u>	
1 _____	_____	_____	_____		
2 _____	_____	_____	_____		
<u>0</u> = Total Cover					

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP8-1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-2	10YR 3/1	100					Muck	
2-12	10YR 4/2	70	10YR 4/6	20	C	M	Clay Loam	
			10YR 4/1	10	D	M	Clay Loam	
12-24	10YR 4/1	80	10YR 4/6	20	C	M	Clay Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- Coast Prairie Redox (A16) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Very Shallow Dark Surface (TF12)
- Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric soil present? Y

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface water present? Yes _____ No X Depth (inches): _____
 Water table present? Yes _____ No X Depth (inches): _____
 Saturation present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No free water or saturation observed within 24 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP9-1Up
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear
 Slope (%): 10-12% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Duluth silt loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
 (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	Total Number of Dominant Species Across all Strata: <u>3</u> (B)
3 _____	_____	_____	_____	Percent of Dominant Species that are OBL, FACW, or FAC: <u>66.67%</u> (A/B)
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>0</u> = Total Cover				
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet
1 <u>Rhamnus cathartica</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	
2 _____	_____	_____	_____	OBL species <u>0</u> x 1 = <u>0</u>
3 _____	_____	_____	_____	FACW species <u>10</u> x 2 = <u>20</u>
4 _____	_____	_____	_____	FAC species <u>30</u> x 3 = <u>90</u>
5 _____	_____	_____	_____	FACU species <u>60</u> x 4 = <u>240</u>
<u>10</u> = Total Cover				UPL species <u>0</u> x 5 = <u>0</u>
				Column totals <u>100</u> (A) <u>350</u> (B)
				Prevalence Index = B/A = <u>3.50</u>
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:
1 <u>Solidago canadensis</u>	<u>50</u>	<u>Y</u>	<u>FACU</u>	
2 <u>Poa pratensis</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	<u>X</u> Dominance test is >50%
3 <u>Glechoma hederacea</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	_____ Prevalence index is ≤3.0*
4 <u>Phalaris arundinacea</u>	<u>10</u>	<u>N</u>	<u>FACW</u>	_____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
5 _____	_____	_____	_____	_____ Problematic hydrophytic vegetation* (explain)
6 _____	_____	_____	_____	
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
9 _____	_____	_____	_____	
10 _____	_____	_____	_____	
<u>90</u> = Total Cover				
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present? <u>Y</u>
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
<u>0</u> = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet)
 All but one species FAC or drier. PI > 3

SOIL

Sampling Point: SP9-1Up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-6	10YR 2/2	100					Loam	
6-15	10YR 3/3	95	10YR 4/6	5	C	M	Loamy Sand	
15-24	10YR 3/3	82	10YR 4/6	15	C	M	Sandy Loam	Gravel Inclusions
			10YR 4/1	3	D	M	Sandy Loam	Gravel Inclusions

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u> N </u></p>
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Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>		<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p>
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<p>Field Observations:</p> <p>Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water table present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u> N </u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No free water or saturation observed within 24 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP9-1W
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 0 to 2% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Duluth silt loam NWI Classification: PEM1A

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
 (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 9</u>
Hydric soil present? <u>Y</u>	
Indicators of wetland hydrology present? <u>Y</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across all Strata: <u>1</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>0</u> = Total Cover				
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet Total % Cover of: OBL species <u>5</u> x 1 = <u>5</u> FACW species <u>95</u> x 2 = <u>190</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>100</u> (A) <u>195</u> (B) Prevalence Index = B/A = <u>1.95</u>
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>0</u> = Total Cover				
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators: ____ Rapid test for hydrophytic vegetation <u>X</u> Dominance test is >50% <u>X</u> Prevalence index is ≤3.0* ____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) ____ Problematic hydrophytic vegetation* (explain) <small>*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic</small>
1 <u>Phalaris arundinacea</u>	<u>95</u>	<u>Y</u>	<u>FACW</u>	
2 <u>Lycopus uniflorus</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
6 _____	_____	_____	_____	
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
9 _____	_____	_____	_____	
10 _____	_____	_____	_____	
<u>100</u> = Total Cover				
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present? <u>Y</u>
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
<u>0</u> = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP9-1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-6	10YR 2/1	100					Muck	
6-26	10YR 2/1	100					Clay Loam	Sand Inclusions

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- Coast Prairie Redox (A16) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Very Shallow Dark Surface (TF12)
- Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric soil present? Y

Remarks:

Assumed depleted at some depth based on vegetation and water table observed in the sample borehole.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface water present? Yes _____ No X Depth (inches): _____
 Water table present? Yes X No _____ Depth (inches): 22
 Saturation present? Yes X No _____ Depth (inches): 22
 (includes capillary fringe)

Indicators of wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Free water present at 22 inches below soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP10-1Up
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear
 Slope (%): 4 to 7% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Duluth silt loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
 (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1 <u>Acer rubrum</u>	5	Y	FAC	Number of Dominant Species that are OBL, FACW, or FAC: <u>2</u> (A)
2 _____	_____	_____	_____	Total Number of Dominant Species Across all Strata: <u>2</u> (B)
3 _____	_____	_____	_____	Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
5 = Total Cover				
Sapling/Shrub stratum (Plot size: <u>15 ft.</u>)				
1 _____	_____	_____	_____	Prevalence Index Worksheet Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>105</u> x 3 = <u>315</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>110</u> (A) <u>335</u> (B) Prevalence Index = B/A = <u>3.05</u>
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
0 = Total Cover				
Herb stratum (Plot size: <u>5 ft.</u>)				
1 <u>Poa pratensis</u>	100	Y	FAC	Hydrophytic Vegetation Indicators: ____ Rapid test for hydrophytic vegetation <input checked="" type="checkbox"/> Dominance test is >50% ____ Prevalence index is ≤3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) ____ Problematic hydrophytic vegetation* (explain) <small>*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic</small>
2 <u>Solidago canadensis</u>	5	N	FACU	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
6 _____	_____	_____	_____	
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
9 _____	_____	_____	_____	
10 _____	_____	_____	_____	
105 = Total Cover				
Woody vine stratum (Plot size: <u>30 ft.</u>)				
1 _____	_____	_____	_____	Hydrophytic vegetation present? <u>Y</u>
2 _____	_____	_____	_____	
0 = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet)
 All species FAC or drier. PI > 3

SOIL

Sampling Point: SP10-1Up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-8	10YR 3/2	100					Loam	
8-18	10YR 4/4	100					Loam	Gravel Inclusions
18+								Restricted

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- Coast Prairie Redox (A16) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Very Shallow Dark Surface (TF12)
- Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock
 Depth (inches): 18

Hydric soil present? N

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)

- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface water present? Yes No Depth (inches): _____
 Water table present? Yes No Depth (inches): _____
 Saturation present? Yes No Depth (inches): _____
 (includes capillary fringe)

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No free water or saturation observed within 18 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP10-1W
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 0 to 3% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Duluth silt loam NWI Classification: PUBGx

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 10</u>
Hydric soil present? <u>Y</u>	
Indicators of wetland hydrology present? <u>Y</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are atypical (dry) based on the gridded database.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet	
1 _____	_____	_____	_____	Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across all Strata: <u>1</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)	
2 _____	_____	_____	_____		
3 _____	_____	_____	_____		
4 _____	_____	_____	_____		
5 _____	_____	_____	_____		
<u>0</u> = Total Cover				Prevalence Index Worksheet	
Sapling/Shrub stratum (Plot size: <u>15 ft.</u>)					
1 _____	_____	_____	_____		Total % Cover of:
2 _____	_____	_____	_____		OBL species <u>40</u> x 1 = <u>40</u>
3 _____	_____	_____	_____		FACW species <u>40</u> x 2 = <u>80</u>
4 _____	_____	_____	_____	FAC species <u>0</u> x 3 = <u>0</u>	
5 _____	_____	_____	_____	FACU species <u>0</u> x 4 = <u>0</u>	
<u>0</u> = Total Cover				UPL species <u>0</u> x 5 = <u>0</u>	
Herb stratum (Plot size: <u>5 ft.</u>)				Column totals <u>80</u> (A) <u>120</u> (B)	
1 <u>Typha angustifolia</u>	<u>40</u>	<u>Y</u>	<u>OBL</u>	Prevalence Index = B/A = <u>1.50</u>	
2 <u>Verbena hastata</u>	<u>15</u>	<u>N</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators:	
3 <u>Persicaria pensylvanica</u>	<u>15</u>	<u>N</u>	<u>FACW</u>		
4 <u>Phalaris arundinacea</u>	<u>10</u>	<u>N</u>	<u>FACW</u>		
5 _____	_____	_____	_____		
6 _____	_____	_____	_____		
7 _____	_____	_____	_____		
8 _____	_____	_____	_____		
9 _____	_____	_____	_____		
10 _____	_____	_____	_____		
<u>80</u> = Total Cover					
Woody vine stratum (Plot size: <u>30 ft.</u>)				_____ Rapid test for hydrophytic vegetation <input checked="" type="checkbox"/> Dominance test is >50% <input checked="" type="checkbox"/> Prevalence index is ≤3.0* _____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) _____ Problematic hydrophytic vegetation* (explain)	
1 _____	_____	_____	_____		
2 _____	_____	_____	_____		
<u>0</u> = Total Cover				*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic Hydrophytic vegetation present? <u>Y</u>	

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP10-1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-8	10YR 2/1	100					Loam	
8-16	10YR 5/1	60	10YR 4/6	40	C	M	Clay Loam	
16-24	10YR 6/2	70	10YR 4/6	30	C	M	Clay Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Dark Surface (S7) (LRR K, L)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (explain in remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric soil present? <u>Y</u>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input checked="" type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Stunted or Stressed Plants (D1)
	<input checked="" type="checkbox"/> Geomorphic Position (D2)
	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)

Field Observations: Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water table present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>18</u> Saturation present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>18</u> (includes capillary fringe)	Indicators of wetland hydrology present? <u>Y</u>
--	--

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Free water present at 18 inches below the soil surface. Surface water present in the center of the basin.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP11-1Up
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear
 Slope (%): 5 to 8% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Duluth silt loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
 (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet	
1 _____	_____	_____	_____	Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A)	
2 _____	_____	_____	_____	Total Number of Dominant Species Across all Strata: <u>1</u> (B)	
3 _____	_____	_____	_____	Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)	
4 _____	_____	_____	_____		
5 _____	_____	_____	_____		
<u>0</u> = Total Cover					
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet	
1 _____	_____	_____	_____	Total % Cover of:	
2 _____	_____	_____	_____	OBL species <u>0</u> x 1 = <u>0</u>	
3 _____	_____	_____	_____	FACW species <u>0</u> x 2 = <u>0</u>	
4 _____	_____	_____	_____	FAC species <u>90</u> x 3 = <u>270</u>	
5 _____	_____	_____	_____	FACU species <u>5</u> x 4 = <u>20</u>	
_____	_____	_____	_____	UPL species <u>10</u> x 5 = <u>50</u>	
<u>0</u> = Total Cover				Column totals <u>105</u> (A) <u>340</u> (B)	
<u>105</u> = Total Cover				Prevalence Index = B/A = <u>3.24</u>	
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:	
1 <u>Poa pratensis</u>	<u>90</u>	<u>Y</u>	<u>FAC</u>	____ Rapid test for hydrophytic vegetation	
2 <u>Verbascum thapsus</u>	<u>10</u>	<u>N</u>	<u>UPL</u>	<u>X</u> Dominance test is >50%	
3 <u>Cirsium arvense</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	____ Prevalence index is ≤3.0*	
4 _____	_____	_____	_____	____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)	
5 _____	_____	_____	_____	____ Problematic hydrophytic vegetation* (explain)	
6 _____	_____	_____	_____	____	
7 _____	_____	_____	_____	____	
8 _____	_____	_____	_____	____	
9 _____	_____	_____	_____	____	
10 _____	_____	_____	_____	____	
<u>105</u> = Total Cover				*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present? <u>Y</u>	
1 _____	_____	_____	_____		
2 _____	_____	_____	_____		
<u>0</u> = Total Cover					

Remarks: (Include photo numbers here or on a separate sheet)
 All species FAC or drier. PI > 3

SOIL

Sampling Point: SP11-1Up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-10	10YR 3/2	100					Loam	
10-24	10YR 4/4	100					Clay Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u> N </u></p>
--	---

Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p>		
<p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>	<p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p>

<p>Field Observations:</p> <p>Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water table present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u> N </u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No free water or saturation observed within 24 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP11-1W
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 0-2% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Duluth silt loam NWI Classification: PEM1C

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
 (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 11</u>
Hydric soil present? <u>Y</u>	
Indicators of wetland hydrology present? <u>Y</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across all Strata: <u>3</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>0</u> = Total Cover				Prevalence Index Worksheet Total % Cover of: OBL species <u>60</u> x 1 = <u>60</u> FACW species <u>40</u> x 2 = <u>80</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>105</u> (A) <u>160</u> (B) Prevalence Index = B/A = <u>1.52</u>
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	
1 <u>Cornus alba</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>	
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>10</u> = Total Cover				
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	
1 <u>Typha angustifolia</u>	<u>60</u>	<u>Y</u>	<u>OBL</u>	
2 <u>Phalaris arundinacea</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	
3 <u>Solidago canadensis</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
6 _____	_____	_____	_____	
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
9 _____	_____	_____	_____	
10 _____	_____	_____	_____	
<u>95</u> = Total Cover				Hydrophytic Vegetation Indicators: ____ Rapid test for hydrophytic vegetation <u>X</u> Dominance test is >50% <u>X</u> Prevalence index is ≤3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
<u>0</u> = Total Cover				Hydrophytic vegetation present? <u>Y</u>

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP11-1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-6	10YR 2/1	100					Muck	
6-18	10YR 2/1	100					Clay Loam	
18-24	10YR 6/1	100					Sandy Clay Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input checked="" type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input checked="" type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u>Y</u></p>
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Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>		<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input checked="" type="checkbox"/> Geomorphic Position (D2)</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</p>
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<p>Field Observations:</p> <p>Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water table present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>(includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u>Y</u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No free water or saturation observed within 24 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP12-1Up
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear
 Slope (%): 10 to 14% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Kingsley sandy loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
SUMMARY OF FINDINGS (If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>N</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet	
1 _____	_____	_____	_____	Number of Dominant Species that are OBL, FACW, or FAC: <u>0</u> (A)	
2 _____	_____	_____	_____	Total Number of Dominant Species Across all Strata: <u>1</u> (B)	
3 _____	_____	_____	_____	Percent of Dominant Species that are OBL, FACW, or FAC: <u>0.00%</u> (A/B)	
4 _____	_____	_____	_____		
5 _____	_____	_____	_____		
<u>0</u> = Total Cover					
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet	
1 _____	_____	_____	_____	Total % Cover of:	
2 _____	_____	_____	_____	OBL species <u>0</u> x 1 = <u>0</u>	
3 _____	_____	_____	_____	FACW species <u>10</u> x 2 = <u>20</u>	
4 _____	_____	_____	_____	FAC species <u>20</u> x 3 = <u>60</u>	
5 _____	_____	_____	_____	FACU species <u>65</u> x 4 = <u>260</u>	
<u>0</u> = Total Cover				UPL species <u>0</u> x 5 = <u>0</u>	
<u>0</u> = Total Cover				Column totals <u>95</u> (A) <u>340</u> (B)	
<u>95</u> = Total Cover				Prevalence Index = B/A = <u>3.58</u>	
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:	
1 <u>Solidago canadensis</u>	<u>65</u>	<u>Y</u>	<u>FACU</u>	____ Rapid test for hydrophytic vegetation	
2 <u>Poa pratensis</u>	<u>15</u>	<u>N</u>	<u>FAC</u>	____ Dominance test is >50%	
3 <u>Cornus alba</u>	<u>10</u>	<u>N</u>	<u>FACW</u>	____ Prevalence index is ≤3.0*	
4 <u>Andropogon gerardii</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)	
5 _____	_____	_____	_____	____ Problematic hydrophytic vegetation* (explain)	
6 _____	_____	_____	_____		
7 _____	_____	_____	_____		
8 _____	_____	_____	_____		
9 _____	_____	_____	_____		
10 _____	_____	_____	_____		
<u>95</u> = Total Cover				*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present? <u>N</u>	
1 _____	_____	_____	_____		
2 _____	_____	_____	_____		
<u>0</u> = Total Cover					

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP12-1Up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-8	10YR 3/2	100					Loam	
8-24	10YR 4/4	100					Sandy Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u> N </u></p>
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Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>		<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p>
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<p>Field Observations:</p> <p>Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X Depth (inches): _____</p> <p>Water table present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X Depth (inches): _____</p> <p>Saturation present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X Depth (inches): _____</p> <p>(includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u> N </u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No free water or saturation observed within 24 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP12-1W
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 0 to 2% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Kingsley sandy loam NWI Classification: PABG

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
SUMMARY OF FINDINGS (If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 12</u>
Hydric soil present? <u>Y</u>	
Indicators of wetland hydrology present? <u>Y</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet	
1 _____	_____	_____	_____	Number of Dominant Species that are OBL, FACW, or FAC: <u>2</u> (A)	
2 _____	_____	_____	_____	Total Number of Dominant Species Across all Strata: <u>2</u> (B)	
3 _____	_____	_____	_____	Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)	
4 _____	_____	_____	_____		
5 _____	_____	_____	_____		
<u>0</u> = Total Cover					
Sapling/Shrub stratum (Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet	
1 _____	_____	_____	_____	Total % Cover of:	
2 _____	_____	_____	_____	OBL species <u>42</u> x 1 = <u>42</u>	
3 _____	_____	_____	_____	FACW species <u>65</u> x 2 = <u>130</u>	
4 _____	_____	_____	_____	FAC species <u>0</u> x 3 = <u>0</u>	
5 _____	_____	_____	_____	FACU species <u>0</u> x 4 = <u>0</u>	
<u>0</u> = Total Cover				UPL species <u>0</u> x 5 = <u>0</u>	
<u>0</u> = Total Cover				Column totals <u>107</u> (A) <u>172</u> (B)	
<u>0</u> = Total Cover				Prevalence Index = B/A = <u>1.61</u>	
Herb stratum (Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:	
1 <u>Phalaris arundinacea</u>	<u>60</u>	<u>Y</u>	<u>FACW</u>	Rapid test for hydrophytic vegetation	
2 <u>Lythrum salicaria</u>	<u>30</u>	<u>Y</u>	<u>OBL</u>	<input checked="" type="checkbox"/> Dominance test is >50%	
3 <u>Bolboschoenus fluviatilis</u>	<u>7</u>	<u>N</u>	<u>OBL</u>	<input checked="" type="checkbox"/> Prevalence index is ≤3.0*	
4 <u>Bidens frondosa</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)	
5 <u>Lycopus uniflorus</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	Problematic hydrophytic vegetation* (explain)	
6 _____	_____	_____	_____	*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
7 _____	_____	_____	_____		
8 _____	_____	_____	_____		
9 _____	_____	_____	_____		
10 _____	_____	_____	_____		
<u>107</u> = Total Cover					
Woody vine stratum (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present? <u>Y</u>	
1 _____	_____	_____	_____		
2 _____	_____	_____	_____		
<u>0</u> = Total Cover					

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP12-1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-5	10YR 2/2	95	10YR 4/6	5	C	M	Clay Loam	
5-24	10YR 5/2	90	10YR 4/6	10	C	M	Clay Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input checked="" type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u>Y</u></p>
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Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>		<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input checked="" type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input checked="" type="checkbox"/> Geomorphic Position (D2)</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</p>
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<p>Field Observations:</p> <p>Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water table present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>14</u></p> <p>Saturation present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>14</u></p> <p>(includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u>Y</u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Free water present at 14 inches below soil surface. Surface water present within the center of the basin.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP12-2W
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 0 to 2% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Kingsley sandy loam NWI Classification: PEM1C

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
SUMMARY OF FINDINGS (If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>Y</u> Hydric soil present? <u>Y</u> Indicators of wetland hydrology present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 12</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1	_____	_____	_____	_____	Number of Dominant Species that are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across all Strata: <u>2</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
2	_____	_____	_____	_____	
3	_____	_____	_____	_____	
4	_____	_____	_____	_____	
5	_____	_____	_____	_____	
<u>0</u> = Total Cover					
Sapling/Shrub stratum	(Plot size: <u>15 ft.</u>)				Prevalence Index Worksheet
1	_____	_____	_____	_____	Total % Cover of: OBL species <u>55</u> x 1 = <u>55</u> FACW species <u>50</u> x 2 = <u>100</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>110</u> (A) <u>175</u> (B) Prevalence Index = B/A = <u>1.59</u>
2	_____	_____	_____	_____	
3	_____	_____	_____	_____	
4	_____	_____	_____	_____	
5	_____	_____	_____	_____	
<u>0</u> = Total Cover					
Herb stratum	(Plot size: <u>5 ft.</u>)				Hydrophytic Vegetation Indicators:
1	<u><i>Bolboschoenus fluviatilis</i></u>	<u>50</u>	<u>Y</u>	<u>OBL</u>	_____ Rapid test for hydrophytic vegetation <input checked="" type="checkbox"/> Dominance test is >50% <input checked="" type="checkbox"/> Prevalence index is ≤3.0* _____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) _____ Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
2	<u><i>Phalaris arundinacea</i></u>	<u>40</u>	<u>Y</u>	<u>FACW</u>	
3	<u><i>Solidago gigantea</i></u>	<u>10</u>	<u>N</u>	<u>FACW</u>	
4	<u><i>Lythrum salicaria</i></u>	<u>5</u>	<u>N</u>	<u>OBL</u>	
5	<u><i>Cirsium arvense</i></u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
6	_____	_____	_____	_____	
7	_____	_____	_____	_____	
8	_____	_____	_____	_____	
9	_____	_____	_____	_____	
10	_____	_____	_____	_____	
<u>110</u> = Total Cover					
Woody vine stratum	(Plot size: <u>30 ft.</u>)				Hydrophytic vegetation present?
1	_____	_____	_____	_____	<u>Y</u>
2	_____	_____	_____	_____	
<u>0</u> = Total Cover					

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP12-2W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-10	10YR 2/1	95	10YR 4/6	5	C	M	Loam	
10-24	10YR 4/1	85	10YR 4/6	15	C	M	Clay Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input checked="" type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u>Y</u></p>
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Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>	<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input checked="" type="checkbox"/> Geomorphic Position (D2)</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</p>
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<p>Field Observations:</p> <p>Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water table present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u>Y</u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No free water or saturation observed within 24 inches of the soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP13-1Up
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear
 Slope (%): 1-6% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Duluth silt loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
 (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>N</u> if yes, optional wetland site ID: _____
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1 <u>Acer rubrum</u>	10	Y	FAC	
2 _____	_____	_____	_____	Total Number of Dominant Species Across all Strata: <u>3</u> (B)
3 _____	_____	_____	_____	Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>10</u> = Total Cover				
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet
1 <u>Rhamnus cathartica</u>	5	Y	FAC	
2 _____	_____	_____	_____	OBL species <u>0</u> x 1 = <u>0</u>
3 _____	_____	_____	_____	FACW species <u>0</u> x 2 = <u>0</u>
4 _____	_____	_____	_____	FAC species <u>110</u> x 3 = <u>330</u>
5 _____	_____	_____	_____	FACU species <u>5</u> x 4 = <u>20</u>
_____	_____	_____	_____	UPL species <u>0</u> x 5 = <u>0</u>
_____	_____	_____	_____	Column totals <u>115</u> (A) <u>350</u> (B)
<u>5</u> = Total Cover				Prevalence Index = B/A = <u>3.04</u>
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators: _____ Rapid test for hydrophytic vegetation <input checked="" type="checkbox"/> Dominance test is >50% _____ Prevalence index is ≤3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
1 <u>Poa pratensis</u>	95	Y	FAC	
2 <u>Glechoma hederacea</u>	5	N	FACU	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
6 _____	_____	_____	_____	
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
9 _____	_____	_____	_____	
10 _____	_____	_____	_____	
<u>100</u> = Total Cover				
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
<u>0</u> = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet)
 All species FAC or drier. PI > 3

SOIL

Sampling Point: SP13-1Up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-14	10YR 3/1	100					Silt Loam	
14-24	10YR 4/4	100					Silt Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- Coast Prairie Redox (A16) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Very Shallow Dark Surface (TF12)
- Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric soil present? N

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface water present? Yes _____ No X Depth (inches): _____
 Water table present? Yes _____ No X Depth (inches): _____
 Saturation present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No free water or saturation observed within 24 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP13-1W
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 0 to 2% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Duluth silt loam NWI Classification: PEM1A

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? present? Yes

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u>
Hydric soil present? <u>Y</u>	
Indicators of wetland hydrology present? <u>Y</u>	
If yes, optional wetland site ID: <u>Wetland 13</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1 _____	_____	_____	_____	Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across all Strata: <u>1</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>0</u> = Total Cover				Prevalence Index Worksheet Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>100</u> x 2 = <u>200</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>100</u> (A) <u>200</u> (B) Prevalence Index = B/A = <u>2.00</u>
Sapling/Shrub stratum (Plot size: <u>15 ft.</u>)				
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>0</u> = Total Cover				
Herb stratum (Plot size: <u>5 ft.</u>)				
1 <u>Phalaris arundinacea</u>	<u>100</u>	<u>Y</u>	<u>FACW</u>	
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
6 _____	_____	_____	_____	
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
9 _____	_____	_____	_____	
10 _____	_____	_____	_____	
<u>100</u> = Total Cover				
Woody vine stratum (Plot size: <u>30 ft.</u>)				
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
<u>0</u> = Total Cover				

Hydrophytic Vegetation Indicators:
 _____ Rapid test for hydrophytic vegetation
 Dominance test is >50%
 Prevalence index is ≤3.0*
 _____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
 _____ Problematic hydrophytic vegetation* (explain)
 *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP13-1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-4	10YR 2/1	100					Loam	
4-12	10YR 2/1	93	10YR 4/6	7	C	M	Silt Loam	
12-24	10YR 2/1	90	10YR 4/6	10	C	M	Silt Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input checked="" type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
--	--	---

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u>Y</u></p>
--	--------------------------------------

Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>		<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input checked="" type="checkbox"/> Geomorphic Position (D2)</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</p>
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<p>Field Observations:</p> <p>Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water table present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u>Y</u></p>
--	---

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No free water or saturation observed within 24 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP14-1Up
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear
 Slope (%): 1-6% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Duluth silt loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? Yes
 (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>N</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Hydric soil present? <u>N</u>	
Indicators of wetland hydrology present? <u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1 <u>Betula papyrifera</u>	15	Y	FACU	
2 _____	_____	_____	_____	Total Number of Dominant Species Across all Strata: <u>3</u> (B)
3 _____	_____	_____	_____	Percent of Dominant Species that are OBL, FACW, or FAC: <u>33.33%</u> (A/B)
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>15</u> = Total Cover				
<u>Sapling/Shrub stratum</u> (Plot size: <u>15 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	OBL species <u>0</u> x 1 = <u>0</u>
3 _____	_____	_____	_____	FACW species <u>0</u> x 2 = <u>0</u>
4 _____	_____	_____	_____	FAC species <u>70</u> x 3 = <u>210</u>
5 _____	_____	_____	_____	FACU species <u>40</u> x 4 = <u>160</u>
<u>0</u> = Total Cover				UPL species <u>0</u> x 5 = <u>0</u>
				Column totals <u>110</u> (A) <u>370</u> (B)
				Prevalence Index = B/A = <u>3.36</u>
<u>Herb stratum</u> (Plot size: <u>5 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:
1 <u>Poa pratensis</u>	60	Y	FAC	
2 <u>Solidago canadensis</u>	25	Y	FACU	____ Dominance test is >50%
3 <u>Andropogon gerardii</u>	10	N	FAC	____ Prevalence index is ≤3.0*
4 _____	_____	_____	_____	____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
5 _____	_____	_____	_____	____ Problematic hydrophytic vegetation* (explain)
6 _____	_____	_____	_____	
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
9 _____	_____	_____	_____	
10 _____	_____	_____	_____	
<u>95</u> = Total Cover				
<u>Woody vine stratum</u> (Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present? <u>N</u>
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
<u>0</u> = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP14-1Up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-16	10YR 3/1	100					Silt Loam	
16-24	10YR 3/1	97	10YR 4/4	3	C	M	Silt Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- Coast Prairie Redox (A16) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Very Shallow Dark Surface (TF12)
- Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric soil present? N

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface water present? Yes _____ No X Depth (inches): _____
 Water table present? Yes _____ No X Depth (inches): _____
 Saturation present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No free water or saturation observed within 24 inches of soil surface.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Lower Afton Road City/County: Maplewood/Ramsey Sampling Date: 11/1/2023
 Applicant/Owner: D.R. Horton State: MN Sampling Point: SP14-1W
 Investigator(s): Mary Clare M. & Michael G. Section, Township, Range: S: 12, T:28N, R:22W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 0 to 2% Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name Duluth silt loam NWI Classification: PABGx

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? present? Yes
SUMMARY OF FINDINGS (If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 14</u>
Hydric soil present? <u>Y</u>	
Indicators of wetland hydrology present? <u>Y</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Climatic conditions are typical (normal) based on the gridded database.

VEGETATION -- Use scientific names of plants.

<u>Tree Stratum</u>	(Plot size: <u>30 ft.</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet
1					Number of Dominant Species that are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across all Strata: <u>2</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
2					
3					
4					
5					
		<u>0</u>	= Total Cover		
<u>Sapling/Shrub stratum</u>	(Plot size: <u>15 ft.</u>)				Prevalence Index Worksheet
1					Total % Cover of: OBL species <u>30</u> x 1 = <u>30</u> FACW species <u>70</u> x 2 = <u>140</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>100</u> (A) <u>170</u> (B) Prevalence Index = B/A = <u>1.70</u>
2					
3					
4					
5					
		<u>0</u>	= Total Cover		
<u>Herb stratum</u>	(Plot size: <u>5 ft.</u>)				Hydrophytic Vegetation Indicators:
1	<u>Phalaris arundinacea</u>	<u>70</u>	<u>Y</u>	<u>FACW</u>	_____ Rapid test for hydrophytic vegetation <input checked="" type="checkbox"/> Dominance test is >50% <input checked="" type="checkbox"/> Prevalence index is ≤3.0* _____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) _____ Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
2	<u>Scirpus pedicellatus</u>	<u>25</u>	<u>Y</u>	<u>OBL</u>	
3	<u>Lycopus uniflorus</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	
4					
5					
6					
7					
8					
9					
10					
		<u>100</u>	= Total Cover		
<u>Woody vine stratum</u>	(Plot size: <u>30 ft.</u>)				Hydrophytic vegetation present? <u>Y</u>
1					
2					
		<u>0</u>	= Total Cover		

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: SP14-1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-12	10YR 5/2	70	10YR 4/6	30	C	M	Loam	
12-24	10YR 4/6						Sandy Clay Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input checked="" type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> Dark Surface (S7) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (explain in remarks)</p>
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*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric soil present? <u>Y</u></p>
--	---

Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>	<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Stunted or Stressed Plants (D1)</p> <p><input checked="" type="checkbox"/> Geomorphic Position (D2)</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</p>
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<p>Field Observations:</p> <p>Surface water present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water table present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)</p>	<p>Indicators of wetland hydrology present? <u>Y</u></p>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No free water or saturation observed within 24 inches of soil surface. Surface water present in the center of the basin.

Lower Afton Road

Wetland Delineation Report

APPENDIX C

Precipitation Data

Maplewood, Minnesota: Precipitation Summary

Source: Minnesota Climatology Working Group

Site Visit: November 1st and 2nd, 2023

Monthly Totals: 2023

Target: T 28N R 22W S 12, Lat: 44.928513 Lon: -92.987635

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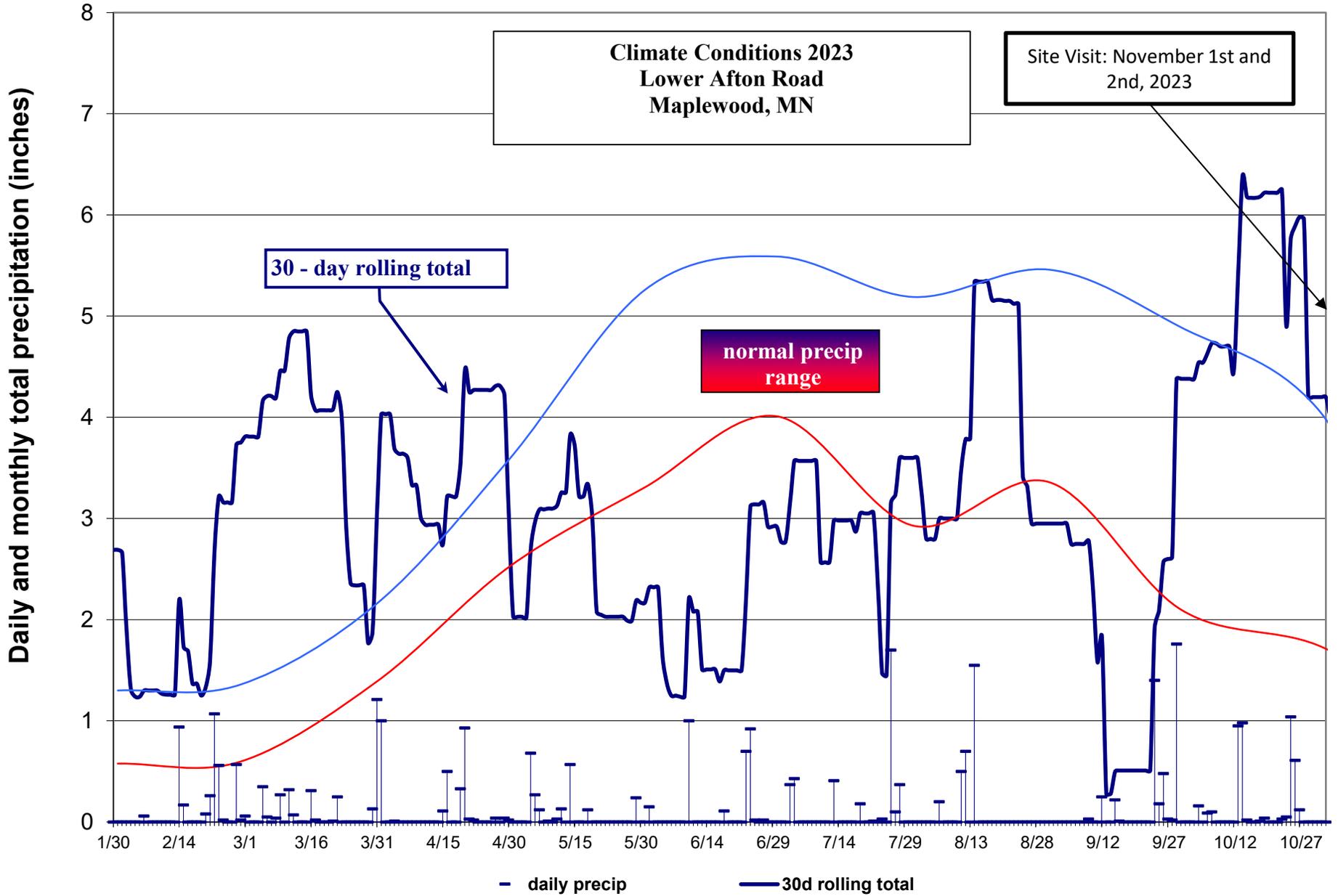
mon year cc tttN rrw ss nnnn oooooooooo pre
Jan 2023 62 29N 22W 35 SWCD 2.69
Feb 2023 62 29N 22W 35 SWCD 3.75
Mar 2023 62 29N 22W 35 SWCD 3.09
Apr 2023 82 28N 21W 18 SWCD 3.03
May 2023 82 28N 21W 18 SWCD 2.17
Jun 2023 82 28N 21W 18 SWCD 2.92
Jul 2023 82 28N 21W 18 SWCD 3.60
Aug 2023 82 28N 21W 18 SWCD 2.95
Sep 2023 82 28N 21W 18 SWCD 4.38
Oct 2023 82 28N 21W 16 SWCD 4.20
Nov 2023 m
  
```

August/September/October/November Daily Records

Date	Precip.	Date	Precip.	Date	Precip.	Date	Precip.
Aug 1, 2023	0	Sep 1, 2023	0	Oct 1, 2023	m	Nov 1, 2023	0
Aug 2, 2023	0	Sep 2, 2023	0	Oct 2, 2023	0	Nov 2, 2023	0
Aug 3, 2023	0	Sep 3, 2023	0	Oct 3, 2023	T		
Aug 4, 2023	0	Sep 4, 2023	0	Oct 4, 2023	.16		
Aug 5, 2023	0	Sep 5, 2023	0	Oct 5, 2023	0		
Aug 6, 2023	.20	Sep 6, 2023	0	Oct 6, 2023	.09		
Aug 7, 2023	0	Sep 7, 2023	0	Oct 7, 2023	.10		
Aug 8, 2023	0	Sep 8, 2023	0	Oct 8, 2023	0		
Aug 9, 2023	0	Sep 9, 2023	.03	Oct 9, 2023	0		
Aug 10, 2023	0	Sep 10, 2023	0	Oct 10, 2023	0		
Aug 11, 2023	.50	Sep 11, 2023	0	Oct 11, 2023	0		
Aug 12, 2023	.70	Sep 12, 2023	.25	Oct 12, 2023	0		
Aug 13, 2023	-	Sep 13, 2023	0	Oct 13, 2023	.95		
Aug 14, 2023	1.55	Sep 14, 2023	0	Oct 14, 2023	.98		
Aug 15, 2023	0	Sep 15, 2023	.22	Oct 15, 2023	.02		
Aug 16, 2023	0	Sep 16, 2023	.01	Oct 16, 2023	0		
Aug 17, 2023	0	Sep 17, 2023	0	Oct 17, 2023	0		
Aug 18, 2023	0	Sep 18, 2023	0	Oct 18, 2023	.01		
Aug 19, 2023	0	Sep 19, 2023	0	Oct 19, 2023	.04		
Aug 20, 2023	0	Sep 20, 2023	0	Oct 20, 2023	0		
Aug 21, 2023	0	Sep 21, 2023	0	Oct 21, 2023	0		
Aug 22, 2023	0	Sep 22, 2023	0	Oct 22, 2023	0		
Aug 23, 2023	0	Sep 23, 2023	0	Oct 23, 2023	.03		
Aug 24, 2023	0	Sep 24, 2023	1.40	Oct 24, 2023	.05		
Aug 25, 2023	0	Sep 25, 2023	.18	Oct 25, 2023	1.04		
Aug 26, 2023	0	Sep 26, 2023	.48	Oct 26, 2023	.61		
Aug 27, 2023	0	Sep 27, 2023	.03	Oct 27, 2023	.12		
Aug 28, 2023	0	Sep 28, 2023	.02	Oct 28, 2023	0		
Aug 29, 2023	0	Sep 29, 2023	1.76	Oct 29, 2023	0		
Aug 30, 2023	0	Sep 30, 2023	0	Oct 30, 2023	0		
Aug 31, 2023	0			Oct 31, 2023	0		

1991-2020 Summary Statistics

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	WARM	ANN	WAT
30%	0.58	0.60	1.39	2.52	3.31	4.01	2.93	3.36	2.10	1.75	1.04	0.84	19.59	31.67	31.37
70%	1.30	1.36	2.16	3.58	5.26	5.59	5.19	5.46	4.89	4.09	1.86	1.83	23.54	36.75	36.36
mean	0.98	1.00	1.85	3.10	4.33	5.03	4.25	4.47	3.37	2.98	1.73	1.43	21.46	34.53	34.46



Minnesota State Climatology Office

State Climatology Office - DNR Division of Ecological and Water Resources

[home](#) | [current conditions](#) | [journal](#) | [past data](#) | [summaries](#) | [agriculture](#) | [other sites](#) | [about us](#) 

Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:

county: **Washington** township number: **28N**
township name: **unnamed** range number: **22W**
nearest community: **Highwood** section number: **12**

Aerial photograph or site visit date:

Wednesday, November 1, 2023

Score using 1991-2020 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from radar-based estimates .	first prior month: October 2023	second prior month: September 2023	third prior month: August 2023
estimated precipitation total for this location:	4.20	4.57R	3.23R
there is a 30% chance this location will have less than:	1.75	2.10	3.36
there is a 30% chance this location will have more than:	4.09	4.89	5.46
type of month: dry normal wet	wet	normal	dry
monthly score	3 * 3 = 9	2 * 2 = 4	1 * 1 = 1
multi-month score: 6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)	Normal (14)		

Other Resources:

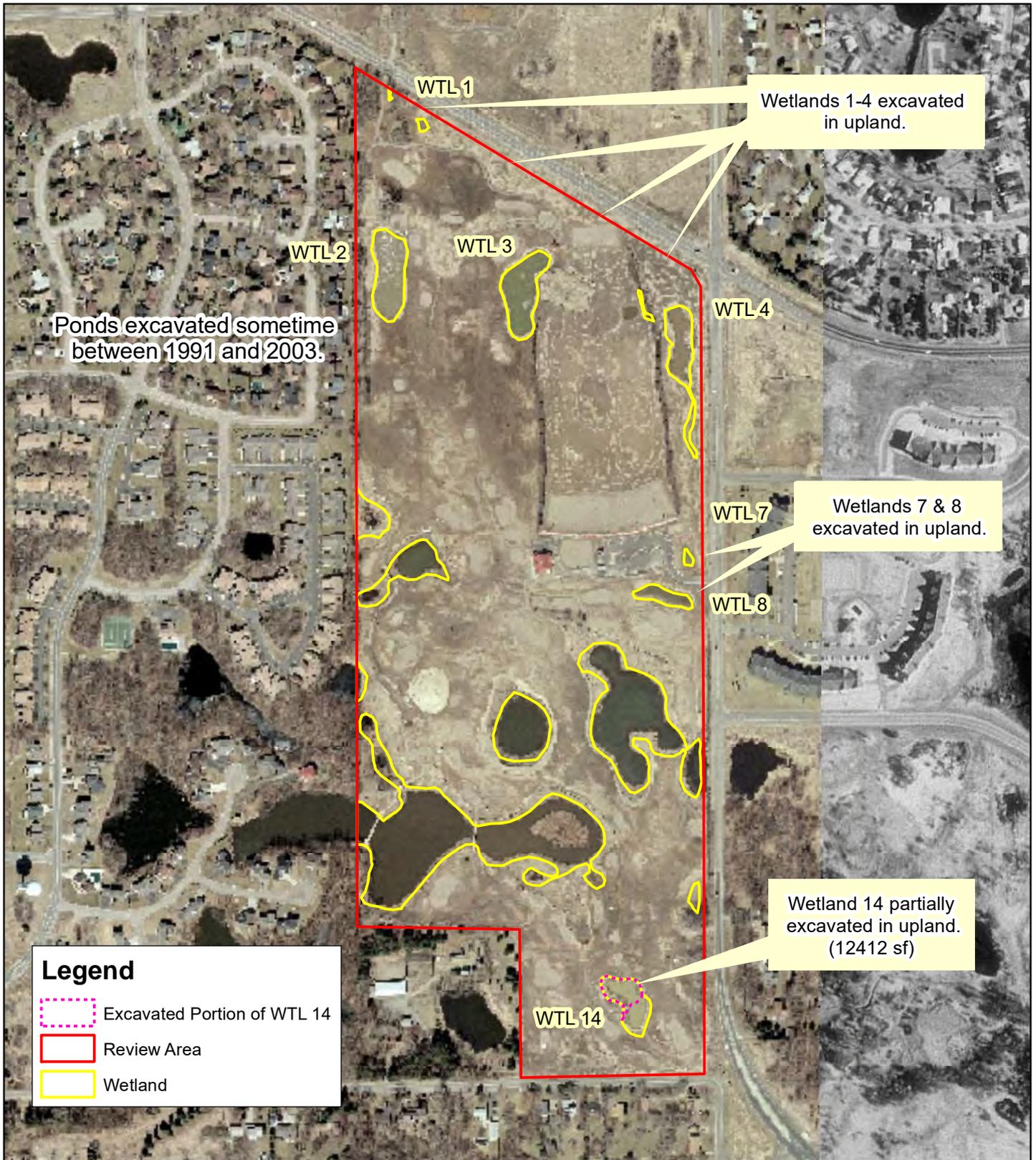
- [retrieve daily precipitation data](#)
- [view radar-based precipitation estimates](#)
- [view weekly precipitation maps](#)
- [Evaluating Antecedent Precipitation Conditions](#) (BWSR)

Lower Afton Road

Wetland Delineation Report

APPENDIX D

Historic Aerial Review



Historic Aerial Review- 2003 Ramsey County Aerial Photo



N

0 1,000



Feet

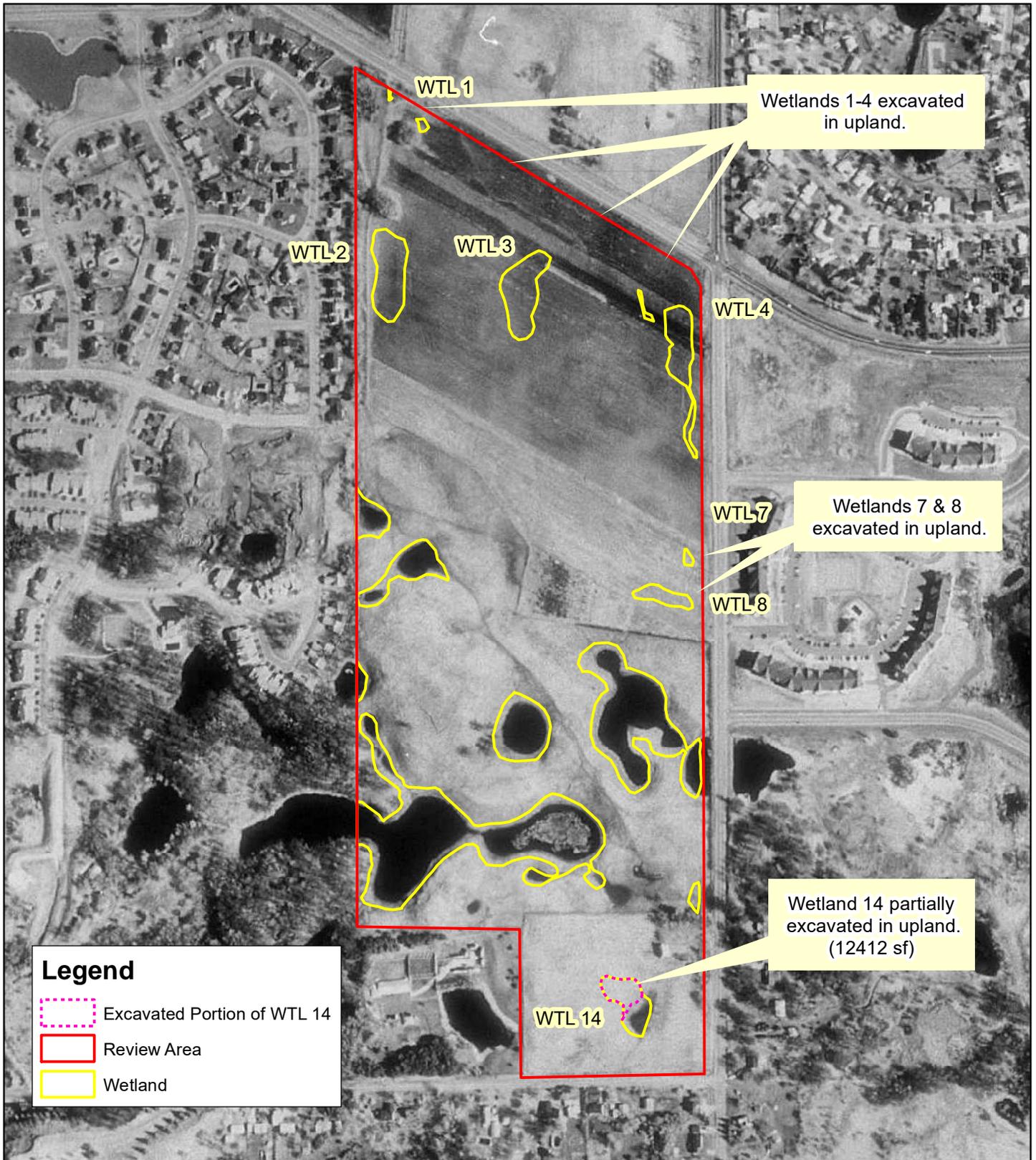
Lower Afton Road (2023 - 160)
Maplewood, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.



KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, USGS



Historic Aerial Review- 1991 Ramsey County Aerial Photo



N

0 1,000



Feet

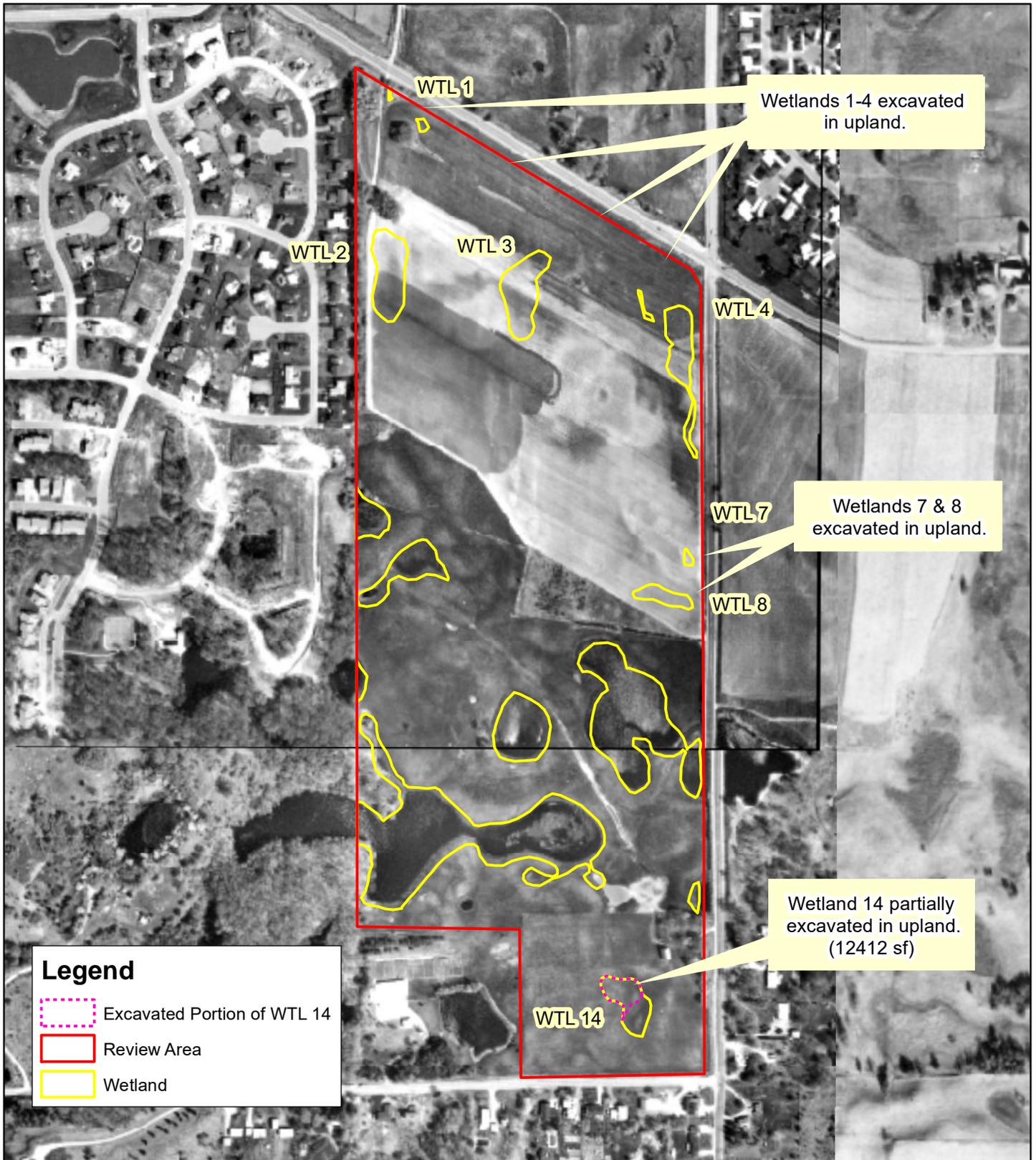
Lower Afton Road (2023 - 160)
Maplewood, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.



KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, USGS



Historic Aerial Review- 1985 Ramsey County Aerial Photo



N

0 1,000



Feet

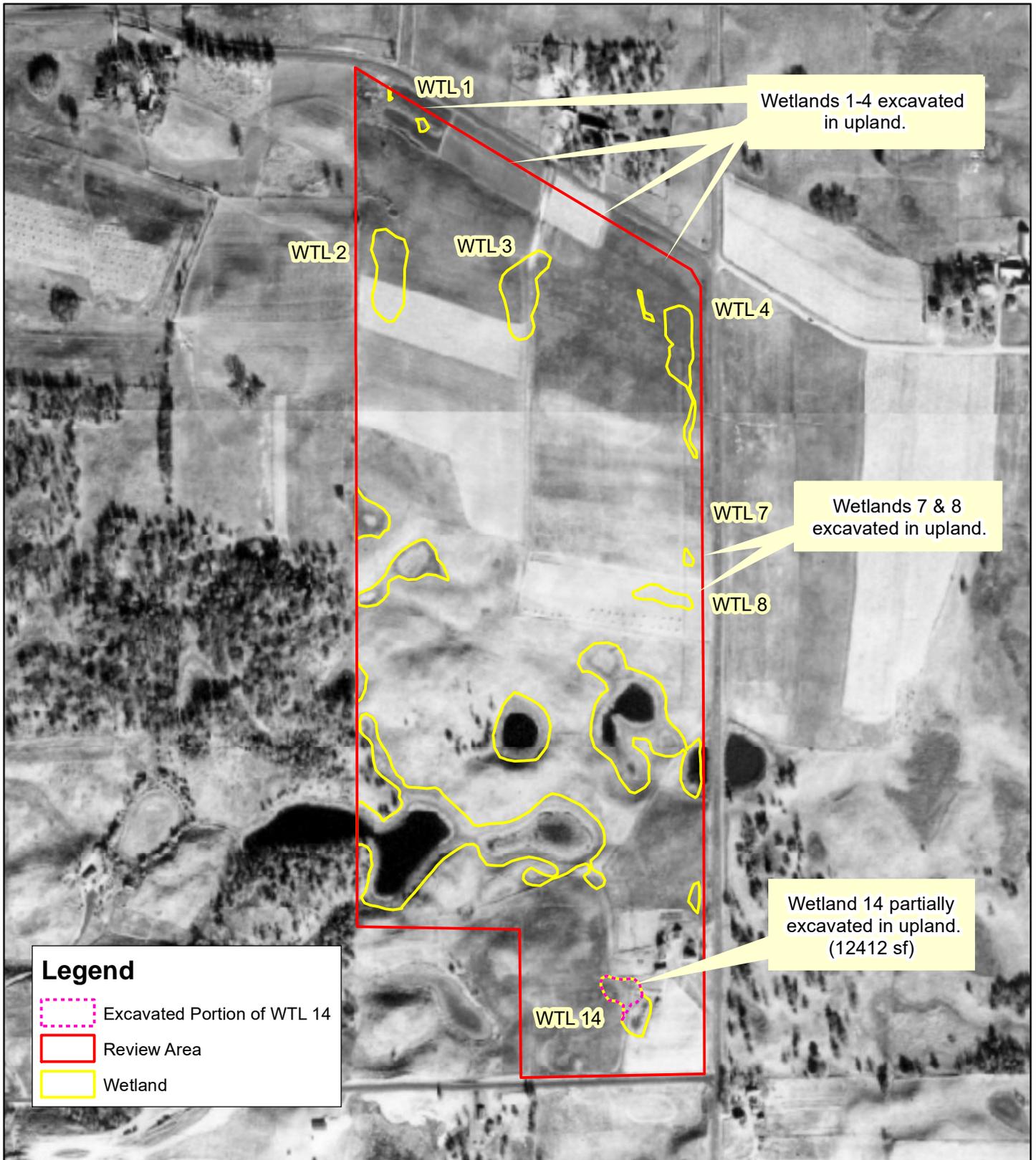
Lower Afton Road (2023 - 160)
Maplewood, Minnesota



KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, USGS

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.



Historic Aerial Review- 1953 Ramsey County Aerial Photo



KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, USGS

N



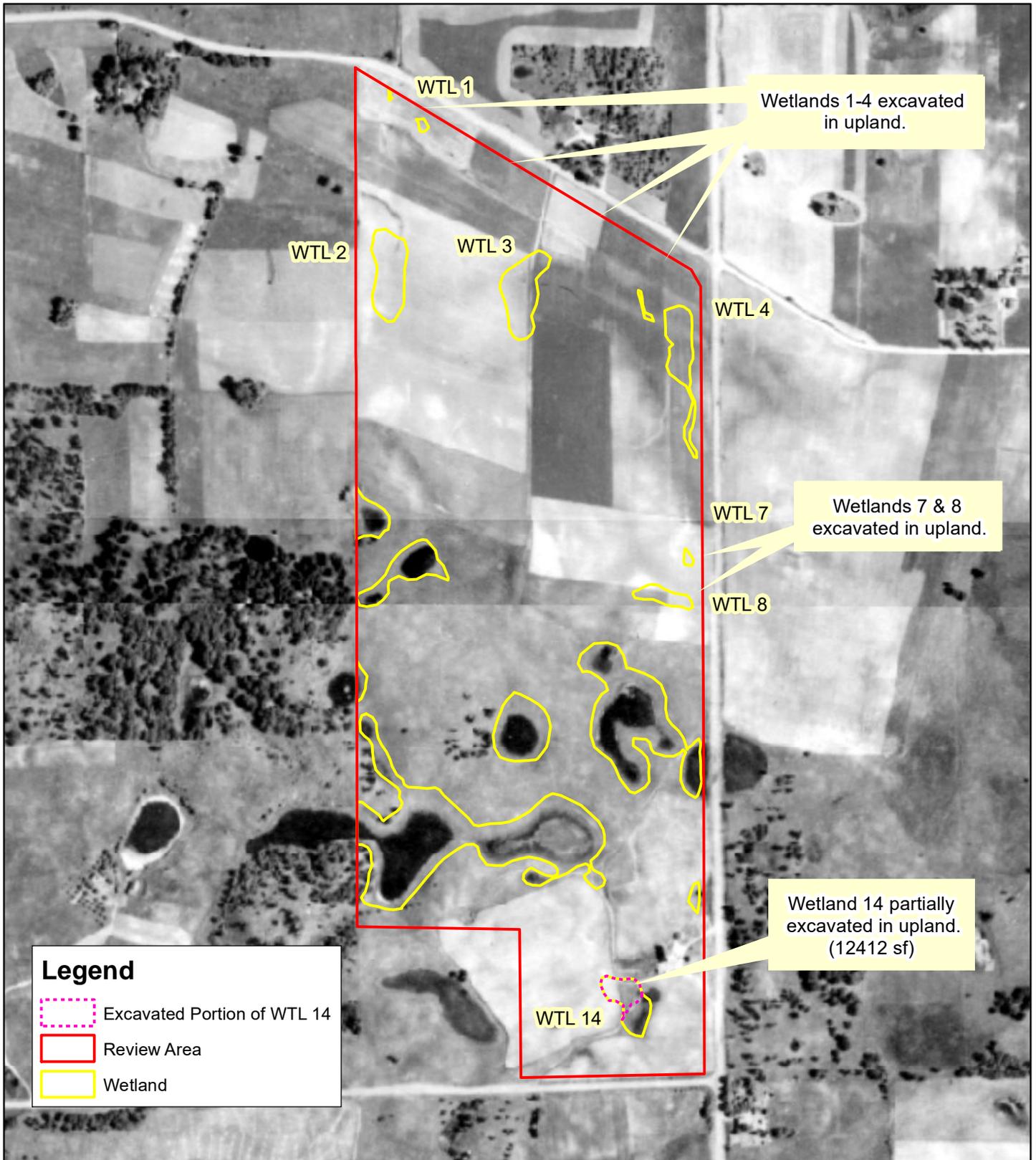
0 1,000



Feet

Lower Afton Road (2023 - 160)
Maplewood, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.



Historic Aerial Review- 1940 Ramsey County Aerial Photo



0 1,000
Feet

Lower Afton Road (2023 - 160)
Maplewood, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.



KJOLHAUG ENVIRONMENTAL SERVICES COMPANY
Source: MNGEO Spatial Commons, USGS

Minnesota Wetland Conservation Act Notice of Decision

Local Government Unit: Ramsey-Washington Metro Watershed District (RWMWD) County: Ramsey
Applicant Name: Deb Ridgeway (D.R. Horton) Applicant Representative: Mary Clare McAleer (Kjolhaug Environmental Services)
Project Name: Lower Afton Rd Golf Course Site LGU Project No. (if any): 24-02 WCA
Date Complete Application Received by LGU: 4/10/2024
Date of LGU Decision: 5/7/2024
Date this Notice was Sent: 5/7/2024

WCA Decision Type - check all that apply

<input checked="" type="checkbox"/> Wetland Boundary/Type <input type="checkbox"/> Sequencing <input type="checkbox"/> Replacement Plan <input type="checkbox"/> Bank Plan (not credit purchase) <input type="checkbox"/> No-Loss (8420.0415) <input type="checkbox"/> Exemption (8420.0420)
Part: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> G <input type="checkbox"/> H Subpart: <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9

Replacement Plan Impacts (replacement plan decisions only)

Total WCA Wetland Impact Area:
Wetland Replacement Type: <input type="checkbox"/> Project Specific Credits: <input type="checkbox"/> Bank Credits:
Bank Account Number(s):

Technical Evaluation Panel Findings and Recommendations (attach if any)

<input checked="" type="checkbox"/> Approve <input type="checkbox"/> Approve w/Conditions <input type="checkbox"/> Deny <input type="checkbox"/> No TEP Recommendation
<p>A wetland delineation report and joint application was originally submitted by the applicant on 11/18/23, however was not ultimately accepted due to submittal outside of the growing season. The joint app included a boundary/type concurrence request and incidental request.</p> <p>At the applicant’s request, the TEP discussed the incidental portion of the application at a virtual meeting on 1/29/24. Based on TEP review and feedback, there was sufficient information available to conclude that Wetlands 1, 2, 3, 4, 7, and 8 are incidental. There was insufficient information available to conclude that the southeast lobe of Wetland 12 and the northwest lobe of Wetland 14 are incidental.</p> <p>The applicant resubmitted a revised joint application on 4/10/24 with a boundary/type concurrence request and incidental request for Wetlands 1, 2, 3, 4, 7, and 8 in accordance with TEP feedback. A field review was completed on 5/2/24. No changes are required to delineated boundaries/wetland types. Wetlands 1, 2, 3, 4, 7, and 8 are deemed incidental. Wetlands 5, 6, 9, 10, 11, 12, 13, and 14 are WCA jurisdictional.</p>

LGU Decision

<input checked="" type="checkbox"/> Approved with Conditions (specify below)¹ <input type="checkbox"/> Approved¹ <input type="checkbox"/> Denied List Conditions: - Submit GIS shapefile of wetland boundaries (including incidental wetlands for our record-keeping purposes).
Decision-Maker for this Application: <input checked="" type="checkbox"/> Staff <input type="checkbox"/> Governing Board/Council <input type="checkbox"/> Other:

Decision is valid for: 5 years (default) Other (specify):

¹ *Wetland Replacement Plan approval is not valid until BWSR confirms the withdrawal of any required wetland bank credits. For project-specific replacement a financial assurance per MN Rule 8420.0522, Subp. 9 and evidence that all required forms have been recorded on the title of the property on which the replacement wetland is located must be provided to the LGU for the approval to be valid.*

LGU Findings – Attach document(s) and/or insert narrative providing the basis for the LGU decision¹.

- Attachment(s) (specify): **Figure 2A- Final Delineation Figure (Existing Conditions)**
- Summary: **See TEP Findings and Recommendations above.**

¹ *Findings must consider any TEP recommendations.*

Attached Project Documents

- Site Location Map Project Plan(s)/Descriptions/Reports (specify):

Appeals of LGU Decisions

If you wish to appeal this decision, you must provide a written request within 30 calendar days of the date you received the notice. All appeals must be submitted to the Board of Water and Soil Resources Executive Director along with a check payable to BWSR for \$500 *unless* the LGU has adopted a local appeal process as identified below. The check must be sent by mail and the written request to appeal can be submitted by mail or e-mail. The appeal should include a copy of this notice, name and contact information of appellant(s) and their representatives (if applicable), a statement clarifying the intent to appeal and supporting information as to why the decision is in error. Send to:

Appeals & Regulatory Compliance Coordinator
Minnesota Board of Water & Soils Resources
520 Lafayette Road North
St. Paul, MN 55155
travis.germundson@state.mn.us

Does the LGU have a local appeal process applicable to this decision?

- Yes¹ No

¹*If yes, all appeals must first be considered via the local appeals process.*

Local Appeals Submittal Requirements (LGU must describe how to appeal, submittal requirements, fees, etc. as applicable)

Notice Distribution (include name)

Required on all notices:

<input checked="" type="checkbox"/> SWCD TEP Member: Alexis Lipstein (Ramsey County) <input checked="" type="checkbox"/> BWSR TEP Member: Ben Meyer
<input type="checkbox"/> LGU TEP Member (if different than LGU contact):
<input checked="" type="checkbox"/> DNR Representative: Jim Levitt
<input checked="" type="checkbox"/> Watershed District or Watershed Mgmt. Org.:
<input checked="" type="checkbox"/> Applicant (notice only): <input checked="" type="checkbox"/> Agent/Consultant (notice only):

Optional or As Applicable:

<input checked="" type="checkbox"/> Corps of Engineers: Alex Meincke
<input type="checkbox"/> BWSR Wetland Mitigation Coordinator (required for bank plan applications only):

Members of the Public (notice only):
Finwall (City of Maplewood)

Other: **Mary Fitzgerald (RWMWD), Shann**

Signature: <i>Nicole Maras</i>	Date: 5/7/2024
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This notice and accompanying application materials may be sent electronically or by mail. The LGU may opt to send a summary of the application to members of the public upon request per 8420.0255, Subp. 3.